

CONSTITUENCY AND NEGATION IN NEWARI

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By

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ABSTRACT

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By

Jyoti Tuladhar

The phrase structure of Newari, a Tibeto-Burman language of Nepal, has not been fully specified within a modern syntactic framework. Such a description is prerequisite to an understanding of the syntax and scope of negation in Newari. This dissertation first determines the constituent structures of Newari within the non-transformational X-bar theory of Residential Grammar (Binkert 1984); and then analyzes the syntax and scope of negation on this basis.

Part One concentrates on the description of Newari. It consists of three chapters: an introduction specifying the objective and focus of this study in Chapter One; a brief description of the fundamental characteristics of Newari in Chapter Two; and an analysis of the phrase structure of the language within the RG framework in Chapter Three. Different levels of the phrasal hierarchy are established, and the internal structures of the Noun Phrase and the Verb Complex are analyzed.

Part Two focuses on the syntax and scope of

negation. Chapter Four summarizes earlier debates on negation in English. In Chapter Five, two negative formation patterns are identified for Newari: sentential/constituent negation (*maI*), and lexical negation (*maII*). Two filters express all relevant constraints on *maI*.

In Chapter Six, the constituents which fall within the narrow scope of negation, i.e., elements unambiguously understood as negated in a non-contextual situation, are distinguished from those constituents which may fall within the wide scope, i.e., elements which speakers elect to focus as negated. Both kinds of scope are explained in terms of "command" and "binding" relations of Residential Grammar.

Chapter Seven presents a summary of the major findings of this study and extends a number of generalizations on the interrelationship of grammatical processes and semantic interpretation in negation in Newari.

To my father
who always said,

“અં માયું ની દુગંક યુઝકયુત સુઃ, મૈં !”

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CHAPTER ONE

INTRODUCTION

1.0: Objective of Dissertation

Negation is a complex linguistic process in Newari despite its surface syntactic simplicity.¹ The fact that semantic complexity is inherent in negation across diverse languages was brought into focus by extensive research on various aspects of negation following Klima's (1964) insightful and comprehensive article on negation in English.

This dissertation began as an attempt to capture adequately the correlation between form and meaning of negation in Newari by focusing on two fundamental questions, the theoretical implications of which are pertinent to any linguistic analysis. These are: (i) how syntactic processes like topicalization, which involve alternative positions of constituents, affect the semantic interpretation of negative sentences; and,

(ii) how this interaction between syntax and semantics is to be expressed in a grammar.

The operation of such a complex process as negation can not be understood without an explicit structural description of the language under study. Newari has not been extensively studied within a modern linguistic framework.

Furthermore, the best known framework, Transformational Grammar (TG), proves problematical for achieving the goals of this thesis. While TG has paid a great deal of attention to relationships between sentences and formulations of conditions on transformations, it has neglected to examine extensively the constituent structure of languages, particularly "exotic" languages like Newari. Although Jackendoff's (1977) study of the phrase structure of English is an exception, his framework is not thoroughly worked out and justifiable. Lack of a well justified phrasal description prior to analysis of any aspect of a language leads to incorrect and incomplete analyses. Given this situation, an investigation such as the present one must present a new version of TG or turn elsewhere for its descriptive framework. Residential Grammar (RG, Binkert 1984) is a fully detailed phrase

structure framework which provides explicit and syntactically defensible descriptions for Newari. In RG, it is possible to encode all the grammatical relationships which TG expresses with transformations directly into the phrasal architecture.

A cursory look at the development of studies on negation shows furthermore that the locus of distinction between syntax and semantics in TG has shifted over the years suggesting a lack of real separation. Confusion occurs when semantic constructs and semantic motivations are used to argue for syntactic processes (see Section 4.2 for discussion). RG focuses explicitly on phrase structure and makes no reference to semantic arguments of any kind. This facilitates the task of distinguishing between those aspects of negation which can be accounted for syntactically, and those which require semantic explanations.

Therefore, the two principal objectives of this dissertation are: first, to determine the constituent structures of Newari within RG framework; and second, to present an explicitly syntactic analysis of negation on the basis of the constituency arrived at by the RG framework. It should then be clear which aspects of negation can be accounted for on purely syntactic grounds and which require semantic explanations. Having

thus determined the specific domains of the syntax and semantics of negation, an attempt will be made to study the interrelationship between the two with reference to negation, and capture those principles which govern this interrelationship in explicit formulations where possible.

1.1: Data: Newari

1.1.1: Present Distribution

Newari, a member of the Tibeto-Burman language family, is spoken natively in the Himalayan kingdom of Nepal by 448,746 people, that is by approximately 3% of the total population of the country.² The highest concentration of Newari speakers is in the Kathmandu Valley, the political, intellectual and administrative center of Nepal, where Newars constitute a significant 52% of the total population of the Valley. The three major towns of the Valley - Kathmandu, Patan, Bhaktapur - and a number of large hamlets such as Kirtipur, Themi, Sankhu, Panga, Thankot, Tokha, Phirping, Nagarkot, and Banepa are densely populated by Newars.

Outside the Kathmandu Valley, Newari speakers are found in almost all the major cities and trade centers of Nepal, for as traders they migrated to all

commercially strategic centers of the country. Newars have also migrated to Sikkim, Bhutan, and the Darjeeling district in India, where they engage primarily in business activities. There was also a large number of Newari merchants in Lhasa, Tibet, prior to the Chinese occupation of Tibet in 1959. However, due to a general tendency observed among migrant Newars to adopt either Nepali or the language of the mainstream culture around their areas of residence, their number, as native speakers of Newari, is negligible.

Three major dialect areas are generally demarcated within the Kathmandu Valley - the northern (including Kathmandu), the eastern (including Bhaktapur), and the southern (including Patan). Among these three, the dialectal difference between Kathmandu and Patan is minimal. It is confined to a small number of lexical items. Vowel length in basic vocabulary items is one area in which the dialectal difference is most evident. Small communities outside the Valley area also show very few differences from the Kathmandu dialect, though some of them, the Pokhra dialect, for instance, claim closer affinity to the Bhaktapur dialect. According to Hashimoto (1977), it was orally reported to him that, "fairly diverse languages," very similar to Newari are spoken in villages around the edge of the

Kathmandu Valley, such as Kotku, Pyanga, Halcha etc. I suspect these 'languages' to be actually dialects of Newari. However, since no systematic dialectal study of Newari has been conducted as yet, the extent of dialectal variation in this language remains to be explored.

Data for this dissertation is drawn totally from the Kathmandu dialect of Newari, because I am a native speaker of this dialect, and because this dialect has been widely recognized as the standard form of Newari for literary and academic purposes.

1.1.2: The Problem: Scope Ambiguity and Surface Syntax

The overall potential for syntactic ambiguity in Newari appears to be minimal. Newari is an SOV language, whose surface syntax is explicitly marked in the form of inflectional case markers and classifiers which reflect underlying thematic relations transparently. Furthermore, it does not have a productive process of passivization as does English. Only stative passives exist in this language, which, unlike normal passives, can neither take an explicit *by*-phrase, nor be interpreted as having an understood agent. As a result, two phenomena which produce considerable ambiguity in English --- constructional homonymy, and passives --

are absent in Newari.³

Potential ambiguity, however, appears to be inevitable in the scope semantics of negation in Newari. Unlike the lexical item not in English, the negative morpheme ma- in Newari occupies a restricted position on the surface structure, bound to the verb as a prefix. But its scope may extend to different constituents or elements in the sentence, irrespective of their positions.⁴ The study of negation thus involves accounting for the interaction between semantic complexity on one hand, and syntactic simplicity on the other.

Within generative theory in the late 1960s and early 1970s, negation was used several times as a crucial argument to support new proposals.⁵ The Generative Semanticists used arguments based on negation to support their postulation of abstract structures and higher verb analysis (McCawley 1973; Ross 1972; Carden 1970; and Lakoff 1969). Chomsky (1971), in his proposal that semantic interpretation is determined by factors of both surface and deep structures, used examples of negation as evidence to argue that certain phenomena such as scope, focus and presupposition can be interpreted adequately only by surface semantic interpretive rules, thus exploding the thesis of

meaning-preserving transformations and exclusive deep structure semantic interpretation. In fact, analyses of negation have undergone several modifications concurrently with every major revision in generative theory. The two basic questions posed above have received different answers in different analyses within generative grammar.

It would be interesting to determine whether the data on negation in Newari, "accord better, ... with a theory in which syntactic relationships are transparent on the surface, and directly related to their corresponding semantic relationships, (or) with a theory in which syntactic relationships are encoded into a single level of representation (whether "deep" or "surface") whose relationship to the semantic component is determined completely by innate principles of universal grammar" (Bowers 1981:11-12). Keeping in mind that within transformational generative grammar, "much of the justification of transformations involve arguments about understood grammatical relations and their representations in deep structure," (Jackendoff 1972:25), I observe that the presence of explicit surface syntax in Newari combined with the absence of normal passives may preclude the need for transformational rules in this language. My conjecture

is that transformations lose much of their functional importance in cases such as these and that surface structure assumes larger significance.

However, the direct correlation between surface syntax and semantic relations is problematical with reference to the scope of negation in Newari. I intend, therefore, to focus on the syntax and semantics of the scope of negation, in order to study the nature and degree of interrelationship between syntactic rules and semantic relations in the operation of negation in Newari.

1.2: Theoretical Frameworks

Very early in the process of my analysis of Newari, I became aware of an imperative need for a rigorous syntactic framework within which to analyze first, the basic phrase structure of Newari, and then, the syntax of negation in this language. I discovered that the more recently revised generative theories of Revised Extended Standard Theory⁶ (Chomsky 1975, 1977; Chomsky and Lasnik 1977; Fiengo 1977), and Government and Binding (Chomsky 1980, 1982) provide no explicit or coherent formulation of a theory of phrase structure or of negation. In fact, outside the area of government and binding, only piecemeal discussions of other

linguistic phenomena are advanced in current generative literature, so that no overall framework is available within which to analyze any extensive set of data in any language. For syntactic analysis of constituency and negation in Newari, therefore, I propose to work within the framework of Residential Grammar as proposed by Binkert (1984).

Residential Grammar (RG), on the other hand, is a syntactic model which directly generates sentences via the base phrase structure component of the grammar. RG does not recognize the duality of representations, deep and surface, of Chomskyan models, and eliminates all syntactic transformations of the Standard Theory (Chomsky 1965), and Extended Standard Theory (Chomsky 1970, 1971, 1972, 1975). But it accounts for all those relations which are handled by transformational rules in classical transformational grammar, "by directly incorporating such relations into the phrasal architecture of surface structure, eliminating completely the concept of syntactic derivation via (ordered) (cyclic) transformational rules." (Binkert 1984: 4)⁷

By analyzing negation strictly within this model, I will show how it is possible to distinguish between what is specifically syntactic in the

description of a linguistic process, and what is semantic. Very often, semantic constructs and semantic motivations are used misguidedly and inexplicitly to argue for syntactic processes. Using this model helps us avoid and eliminate that problem.

There appears to be unanimous agreement among generative linguists on the need for surface interpretation of the scope of logical operators such as negatives and quantifiers. In Jackendoff's (1972) interpretive theory of negation, his basic argument is that semantic phenomena cannot be treated together as one conglomerate block, but deserve individual analyses depending on the nature of the semantic phenomena concerned. Various parts of semantic representations are related to the semantic component at different levels of syntactic derivation. The scope of negation, for instance, belongs to the second hierarchical structure called the Modal Structure, which is primarily dependent on the surface structure for semantic interpretation. (See Jackendoff 1972, for details).

My original goal was to consider the nature of correlations between the syntactic rules of negation worked out within RG, and the surface semantic interpretive rules based on Jackendoff, keeping in mind that one model eliminates all syntactic derivations, and

the other contains them. Both models, however, read those aspects of syntax and semantics pertinent to this thesis off the surface structure alone. However, the analysis of scope within the RG theory, in terms of "command" and "binding" relations proved adequate in explaining the scope of negation in Newari. I discovered no need for taking recourse to semantic interpretive rules. Therefore, I work entirely within the framework of the RG theory for an analysis of both the syntax and the scope of negation in Newari.

1.3: Division of Chapters

This dissertation is divided into two parts. Part I consists of three chapters: an introduction specifying the objective and focus of this study in chapter one; a brief description of the phonology and morphology of Newari in chapter two; and an analysis of the phrase structure of Newari within the RG framework in chapter three.

Part II concentrates on an analysis of the syntax and semantics of negation. Chapter four presents an overview of negation in modern linguistic theory. Chapter five examines the syntax of negation in Newari within the RG framework. It deals with the syntactic distributions of two kinds of negation in Newari, maI

and maiI ; lexical polarity; multiple negatives; mai and the verbal complex; and the specification of the surface constraints on the negative formative mai. Chapter six examines the scope of negation in terms of "command" and "binding" relations, and evaluates the explanatory adequacy of the RG model in accounting for the scope of negation. An attempt is made to determine what kinds of constituents or elements can function as the narrow scope of negation, and whether or not we can detect a consistent pattern as to which constituents fall within the narrow scope of negation in unmarked sentences with no contrastive intonation patterns or topicalization. I then deal with the wide scope of negation, induced by topicalization, intonation contours, overt emphatic markers, and demonstratives. Chapter seven presents a summary of the major findings of this study and extends a number of generalizations on those principles which govern the interrelationship of grammatical processes and semantic interpretation in negation in Newari in particular, and in languages, in general.

Notes on Chapter One

¹Newari is classified as a Tibeto-Burman language in the four major classifications of Sino-Tibetan languages, (Konow 1909; Voegelin and Voegelin 1964, 1965, 1977; Shafer 1966; and Benedict 1972), based on the lexical, phonological, morphological and geographical factors of the languages surveyed. Hodgson (1828) determined, for the first time, the close affiliation of Newari to Tibetan on the basis of the comparative study of Newari and Tibetan Core Vocabulary. He established that, "the root and stock of Newari are Trans-Himalayan and Northern" (1828: 3). Konow's classification (in Grieson 1909) confirms that Newari is a member of the Sino-Tibetan language family. However, attempts to subclassify Newari specifically into one or the other of the multitudinous divisions within this linguistic stock has proved somewhat problematical, due to many divergences which Newari shows.

²Census Reports of 1981. There are about 36 to 40 languages spoken in Nepal, of which only 11 languages are spoken by more than one percent of the total population. Nepali, an Indo-Aryan language, is the official language, spoken by approximately 58% of the population.

³Classic examples of constructional homonymity and syntactic ambiguity based on passives are (i) and (ii) respectively:

- (i) Flying planes can be dangerous.
- (ii) I had a book stolen from me by a thief.

⁴In chapter five, I distinguish between two types of ma- negatives: maI and maII. maI is defined as a verbal modifier, prefixed to the verb, which occasions sentential or constituent negation. maII is affixal or lexical negation. Here I refer to maI, the primary focus of this study.

⁵In chapter four, I present an overview of linguistic works on diverse aspects of negation within the overall generative framework.

⁶The Revised Extended Standard Theory (Chomsky 1975, 1977; Chomsky and Lasnik 1977; Fiengo 1977) puts forward the thesis that only surface structures,

enriched by the trace theory of movement rules, contribute to semantic interpretation. Surface structure semantics, therefore, assumes greater significance, effecting a major theoretical reorientation. Surface structure semantic interpretive rules involve bound anaphora, thematic relations and scope of logical operators such as negatives and quantifiers. The scope of negation is now interpreted as a surface phenomenon. However, apart from incidental references to negation, I have not come across any detailed treatment of negation in current generative literature.

⁷All references to Binkert in this study are to Binkert (1984), unless otherwise specified.

CHAPTER TWO

A BRIEF DESCRIPTION OF NEWARI

2.0: Introduction

Newari is one of the oldest known languages of Nepal with a distinct literary tradition and as many as three or four scripts.¹ For a language of such history and cultural importance, it is, relatively speaking, one of the least known languages of the area. There is controversy over much of the grammatical description of the language, as the reader will see in nearly every section of this descriptive summary. Yet, some basic acquaintance with the language is essential to understand the analytical options discussed in later chapters.

Therefore, my objective in this chapter is only to present the fundamental characteristics of the language as they have been generally worked out by scholars. I begin with a brief description of Newari in

terms of genealogical classification and a survey of traditional and modern linguistic studies on Newari. In Section One, I discuss the subclassification of Newari within the four major classification systems of the Sino-Tibetan languages. Section Two deals briefly with a few significant traditional and contemporary works on Newari grammar and vocabulary. In the remaining two sections, I concentrate on the phonology and morphology of the language. The constituent structure of the simple sentence in Newari is detailed in chapter three.

2.1: Classification of Newari

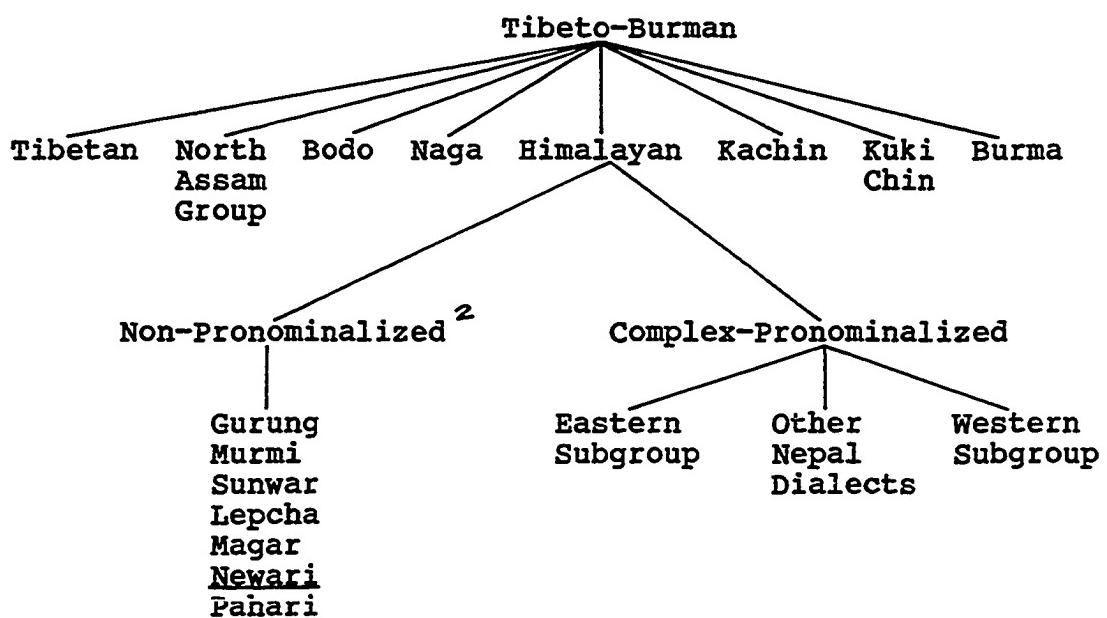
Newari is classified as a Tibeto-Burman language in the four major classifications of Sino-Tibetan languages, (Konow 1909; Voegelin and Voegelin 1964, 1965, 1977), Shafer 1966; Benedict 1972), based on the lexical, phonological, morphological and geographical factors of the languages surveyed. As I stated in Note One of Chapter One, attempts to subclassify Newari specifically into one or the other of the multitudinous divisions within the Sino-Tibetan language family have proved problematical, due to the many divergences which Newari shows. First, a brief overview of the four classifications relevant to Newari is presented. Second,

I examine how and why these divergences occur in this language, posing a problem in the specific subclassification of Newari.

2.1.1 Konow (1909)

Based exclusively on lexical and morphological evidence, Konow groups Newari with other hill languages of Nepal such as Gurung, Murmi, Sunwar, etc. into the Non-Pronominalized subdivision of the Himalayan branch of the Tibeto-Burman stock, as shown in Figure One.

Figure One Konow's Classification of Newari



2.1.2: Voegelin and Voegelin (1964, 1965)

This classification presents one branch of the Sino-Tibetan stock as the Gyarung-Mishmi family which is subdivided into the Western Complex, Eastern Nepal Subgroup, and Non-Pronominalized Subgroup (See Figure Two). Newari is placed into the Non-Pronominalized Subgroup together with the Gurung and Murmi, thus supporting Konow's earlier classification. Voegelin & Voegelin also appear to have used lexical and morphological criteria for comparative purposes.

2.1.3: Shafer (1955, 1966)

Shafer (1955) rejects Konow's classification on the grounds that the latter's criteria of comparison are inadequate. He states that morphological correspondences cannot be used as a primary criterion of linguistic relationships if Sino-Tibetan languages do not possess anything resembling Indo-European morphology. He suggests the use of phonetic equations or sound correspondences as a more reliable basis for comparison.

Shafer reinterprets the relationship and affiliations of Sino-Tibetan languages by working out sound correspondences and determining phonetic equations among various groups of languages. First, it must be

noted that in his classification, there is no autonomous group of languages commonly referred to as the 'Tibeto-Burman' languages. Rather, he establishes a single Sino-Tibetan family branching off into the six primary divisions as shown in Figure Three. Second, he presents an indefinite subsection comprising probably sections of Bodic and Burmic divisions. This subsection is further subdivided into seven units, of which Newari together with Pahari forms one compact unit called Newarish. Third, Shafer (1952) traces the phonetic development of Newari and attempts to establish sound correspondences relating it to Tibetan, Burmese and Kuki. He discovers that Newari resembles middle Burmese (written Burmese) or even modern spoken Burmese more than it does old Bodish (Classical Tibetan), because Newari has lost all traces of prefixes, and of many final consonants.

His classification of Newari, however, is negatively derived, for he claims that Newarish does not seem to possess features distinctive from either Bodic or Burmic divisions. Therefore, it could probably be classified under either. But he goes on to argue that Newari is affiliated to the Bodic division.

Fourth, languages such as Gurung, and Murmi, which Konow classifies as Non-Pronominalized languages

now fall into the Gurung branch of the Bodish division in Shafer's groupings, thus representing differently the mutual affiliations of the Pronominalized and Non-Pronominalized languages.

Figure Two Voegelin and Voegelin's Classification

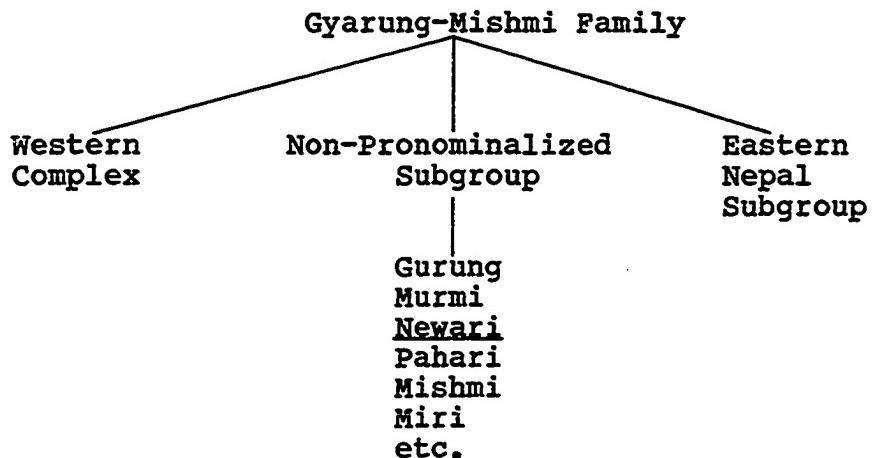
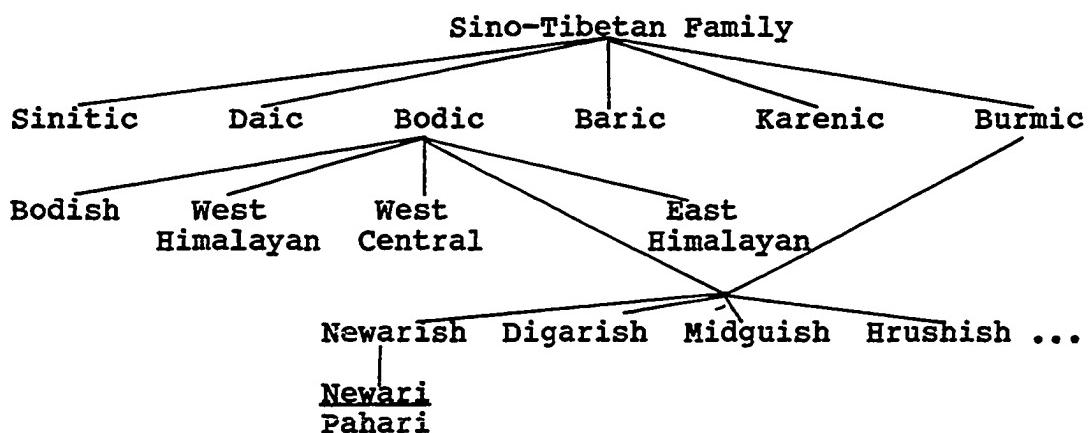


Figure Three Shafer's Classification



2.1.4: Benedict (1972)

Benedict lists seven primary divisions or nuclei of Tibeto-Burman but finds problems with a number of smaller units which "resist all effort at taxonomic reduction" (1972:4). Newari apparently is one such unit, for he states, "Vayu and Chepang stand fairly close to the Kiranti nucleus, one of the seven nuclei, whereas Newari, the old state language of Nepal, shows many points of divergences, and can not be directly grouped with Bahing and Vayu" (1972:5-6). He hypothesizes that Newari is one of those languages which form connecting links between different nuclei.

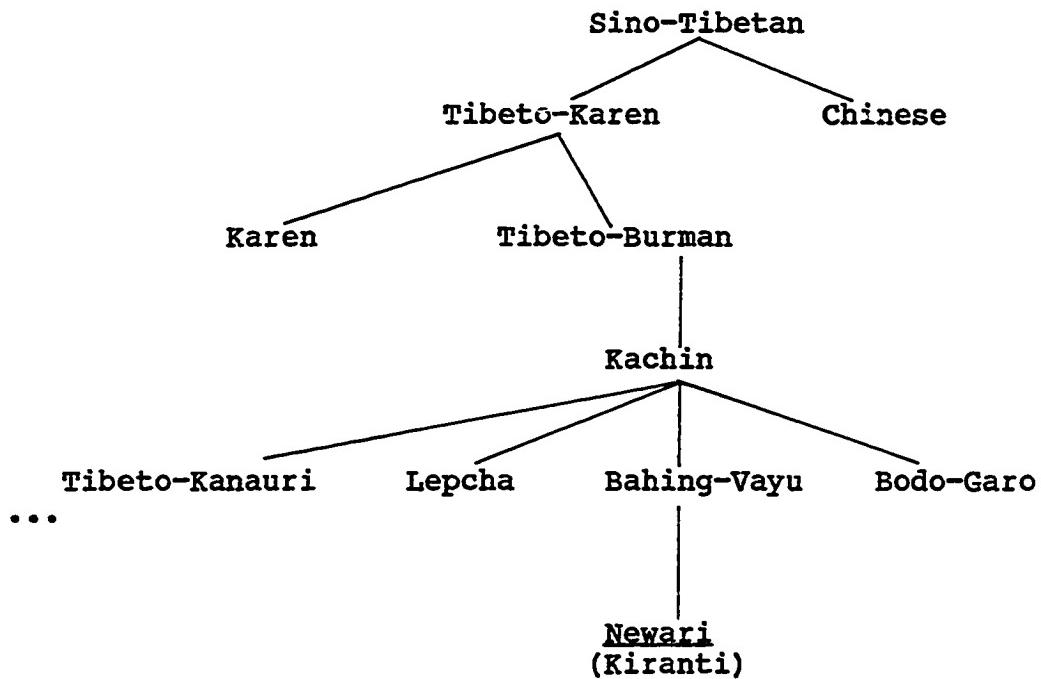
In his classification, Benedict relies primarily on lexical considerations and uses morphological and syntactic considerations as criteria of secondary importance (See Figure Four).

2.1.5: Glover's Classification (1970)

Mention must also be made of Glover's classification (1970) which largely corroborates Shafer's for the languages they both cover. Glover uses a lexico-statistical computational method (glottochronology). He classifies a number of Tibeto-Burman languages of Nepal on the basis of the

100-word Swadesh list. He postulates only three variations from Shafer's analysis, one of which is "the inclusion of Newari along with Chepang in the West Central Himalayish Section instead of placing it in a separate section which Shafer calls "Newarish" (1970:25).

Figure Four Benedict's Schematic Chart



2.1.6: Influence of Sanskrit

As indicated by the above classifications, Newari is distinctly Tibeto-Burman in its phonology, morphology, and simple syntax. But in its lexis and certain aspects of syntax, it diverges considerably from the other affiliated languages. An extremely significant factor in the historical development of Newari has been the extensive influence of Sanskrit from a very early date and the assimilation of Indic features especially in its lexis and inflectional system.

Epigraphic evidence shows that prior to the thirteenth century A.D., Sanskrit was the only language used in inscriptions, Buddhist and Hindu manuscripts, and all religious rites, rituals and teachings within the Kathmandu Valley. The ruling dynasties strongly propagated the use of Sanskrit till the mid-fourteenth century A.D. Vernacularization of inscriptions appears to have begun during the early Malla period (1207-1400 A.D.), probably due to the decline of Sanskrit scholarship among the priests. L. Petech (1958) observes that in the rich epigraphy of the Mallas, "the language is at first Sanskrit only but technical portions (land measurement, etc.) tend more and more to be in Newari. The script is Newari" (1958:11).

Later, when Newari came to be used for purposes of translations and commentaries on Sanskrit texts, it was the same class of people who used Sanskrit originally that now switched over to Newari. Sanskrit definitely came to be used as a model. This intensified Sanskrit influence on Newari.

As a result of this extended influence, Newari appears to have lost several important Tibeto-Burman features. Konow (1909) notes that a common characteristic of Tibeto-Burman languages is the absence of grammatical form words and conjugational forms. According to him, a Tibeto-Burman verb is not capable of inflection in person, number or gender. But modern Newari verbs possess inflection in person and tense while nouns have developed a case system. This is very likely an evidence of Sanskrit influence on Newari.

The extent of Sanskrit influence on Newari syntax and morphology has been studied neither scientifically nor extensively. Evidently, the highest number of borrowings noted are in the lexicon. Hodgson (1874) observes that Newari lacks "words expressive of general ideas; thus Creation, God, have no Newari names, and the Sanskrit ones have therefore been borrowed of necessity," (1874:5) and "the early adoption of Sanskrit as the sole language of literature has facilitated this

infusion" (1874:3).

In fact, Newari has undergone such an intense process of Sanskritization that Chatterjee (1950) correctly asserts that "Newari has now come in line with the modern Indian languages (excepting Urdu) in going to Sanskrit for all its higher words."³

In brief, Newari presents an extremely interesting case of a language in which the divergences noted in relation to other Tibeto-Burman languages are largely due to these superimposed elements from Sanskrit.

2.2: Works on Newari

There is no authoritative historical or grammatical study of Newari as yet, despite repeated testimonies by foreign scholars on the advanced condition of Newari language and literature since the fourteenth century A.D. The few existing works on Newari may be divided into three categories:

- (a) Traditional grammars and dictionaries by foreign scholars,
- (b) Traditional grammars by native grammarians,
- (c) Linguistic analyses within modern linguistic theory.

2.2.1: Studies by Foreign Scholars

Very significant pioneering works on Newari were published by six foreign scholars. Hodgson (1828) and Conrady (1891) pointed out the affinities of Newari, Tibetan, and the 'Indo-Chinese languages' leading to the classification of Newari as a Tibeto-Burman language. Conrady prepared an excellent study called Das Newari Grammatik und Sprachproben in 1891, and an edition of a short Sanskrit and Nepal Bhasa dictionary with a preface in the Journal of the German Oriental Society in 1893. Nikolai Minayef, a Russian scholar, is known to have taken Pandit Gunananda's dictionary to Leningrad in 1875. Conrady's dictionary is based on this source.

Konow's (1909) sketchy description of the phonology, morphology and syntax of Newari in the Linguistic Survey of India, Vol.III, Part I, (214-220 pp.), though only six pages in length and totally inadequate, is notable for setting the tradition for serious investigation of Newari as a member of the Sino-Tibetan family.

Two works by Jorgensen deserve special mention: A Dictionary of the Classical Newari (1936), and A Grammar of the Classical Newari (1941). Though these works are based on the study of older manuscripts and do

not reflect the spoken language of the period, they are the most exhaustive and systematically organized works on Classical Newari as yet.⁴ The grammar is purely descriptive and traditional in its approach. The section on phonology is not reliable, though Jorgensen's notes on sound changes -- vocalic changes and dropping of final consonants -- may provide interesting insights for historical linguistics. His description of Accidence and Syntax in Newari is excellent. His observations on the Verb, Noun, and Nominal Cases are perceptive. His classification of the Verb Types in Classical Newari is still applicable to Modern Newari, though he treats several features now obsolete due to the nature of the sources he uses. Jorgensen's grammar marks the first serious attempt at a traditional description of Newari of this period.

Other valuable contributions were made by Kirkpatrick (1811), Hamilton (1879), Petech (1958), and Levi (1905-1906), in the form of scattered comments, insightful observations and word lists helpful for lexicographers.

2.2.2: Traditional Grammars by Native Grammarians

Prior to the 1950's, there is no indication of much active interest among native scholars in the field

of Newari grammatical studies. Only four works date from this period. Sukraraj Shastri's Nepal Bhasa⁵ Vyakaran (1928), the first known grammar of Newari; Adi Bajracharya's Nepal Bhasaya Mu Lapu (1948); Pandit Gunananda's dictionary of one thousand words; and Nepal Bhasaya Vyakaran composed by Pandit Amritananda at the inspiration of Hodgson.

The 1950's and the following decades, however, witness an outburst of interest in Newari language and literature, as is amply reflected in the publication of several grammars by native scholars. The traditional comparative approach with heavy concentration on philological, historical reconstruction, genealogical classification, etc., form the basis of many of these works, while others were solely written for pedagogical purposes. These pedagogical grammars deal only with the salient features of Newari grammar. They are very short and expressly simplified in presentation to meet the instructional needs of school and college students. The treatment of phonology is virtually non-existent, and the syntactic description is reduced to fit a Sanskrit model. The application of the Sanskrit descriptive categories to Newari has resulted in an unbalanced account of linguistic facts.

A few examples will illustrate the state of

Newari scholarship. First, there is Kansakar's Pauva (1957), which is only ninety-two pages long. One section consists of a superficial treatment of nominal case-system, list of case markers and a brief discussion of ways to recover the lost consonants. But the major section of the grammar is devoted to synonyms, usage of words in proper contexts in sentences, idioms and proverbs, and compound formation.

Second, there is Srestacharya's Chalacha (1967, 52 pp.), which, though very short, provides a good traditional description of number, gender, inflectional suffixes, uses of the verb, tenses, verbal formation, derivational form and compound form; however, his treatment of these topics is very brief.

Third, there is Sagar's Nepal Bhasa Vyakaran (1962), which is one of the most extensive treatments of Newari grammar in a quasi-Sanskrit model. The phonology section is useless, because it is based on the misconception that by virtue of Newari and Sanskrit sharing a common script, the phonological characteristics must also be similar. The sound system of Newari is therefore misrepresented. The morphology section based largely on Sanskrit is adequate. Nouns and pronouns are paradigmatically analyzed in eight cases of Sanskrit, though the linguistic facts of Newari show

that only five case-marking forms exist. The division of nominals into two notional categories is justifiable on morphological grounds. The analysis of the verb is helpful. Three tenses -- past, present, and future -- are distinguished. The verbs are categorized structurally into ten classes, each distinguished by the form of "prataya" or suffix morpheme used. A slight overlapping is evident in this classification.

Some of these grammars are actually written as guides on 'how to write correct Newari'. Piwa's two books, Nepal Bhasa Kha: Katha chwedu lapu (1956), Raswadirgaya me (1959, 1963); and Hridaya's Nepal Bhasa Ge Chwedu (1952) belong to this category.

A number of lexicographical works have appeared through the years, in the form of dictionaries, word and phrase books, collection of idioms and proverbs, to supplement the purely grammatical studies. Some of the important works in this direction are: Joshi's Sanshipta Nepal Bhasa Shabdakosh (1956) and the corrective supplement (1956); Tuladhar (1949); S. Joshi (1953, 1958, 1962); Srestacharya (1963); and Bajracharya (1954, 1958).⁶

2.2.3: Recent Linguistic Studies

Recent linguistic studies on Newari were initiated by the members of the Summer Institute of Linguistics in 1966. Austin Hale has accumulated and partially published analyses of Newari dialects, principally of the Kathmandu dialect including its phonology, syntax and lexicon. His segmental synopsis of Newari (1970) and Newari phonemic summary (Hale and Hale 1969), provide the basic framework for any future phonological analyses. He has also discussed several areas of Newari syntax: nouns (1971), verbs (1971), person markers as conjunct and disjunct forms (1971), forms of verbal bases in Newari (1973), and role and case in Newari (Hale and Manandhar 1973). His syntactic analyses are based for the major part on the Tagmemic theory proposed by Pike (1964) and extended by Glover. Hale also introduced a Roman orthography for Newari which he later revised with Srestacharya (1972). Most of Hale's works are preliminary in nature, since no prior investigation within the modern linguistic tradition precedes his work. His remarkable contributions lay the groundwork for further scientific research on the language.

M. Hashimoto (1977) has compiled and published a

comprehensive lexicon of Bhadgaon or Bhaktapur Newari vocabulary, a dialect hardly surveyed. He adopts an innovative approach by trying to examine the Newari language, and certain aspects of Newari culture as reflected in the language, from a Sinitic linguistic and cultural perspective. All earlier works on Newari tended to view it within the Indic context. Hashimoto's originality lies in the selection, categorization, and organization of vocabulary items within this new perspective.

I. Srestacharya (1976) has conducted a study of certain taxonomic relations within the vocabularies of the Newar farming communities, or Jyapus, of Panga and Naga. He focuses on those areas of Newari vocabulary most familiar to those in farming communities and probably less familiar to city dwellers. Based on natural conversational texts, this is a reliable piece of work on lexicography.

In the field of syntax, Kolver's (1976) analysis of the syntax and verb categorization of Newari within the tagmemic framework deserves special mention. From among native scholars, S. Shrestha, R. Sharma and I. Mali, who are actively engaged in studies of Newari language and literature, have begun to focus their interests on the syntactic aspects of Newari, long

neglected.

2.3: Phonological System in Newari

Phonology is the least adequately described aspect of Newari. Traditional grammars provide short sketchy phonological descriptions based solely or principally on written documents. Modern data is not considered at all. A misleading assumption underlying these descriptions is that Sanskrit and Newari share a common phonology since both at present share the same script. A series of preliminary studies -- Hale and Hale (1969), Hale (1970), and Hale and Srestacharya (1972) -- may be viewed as the first attempts at a systematic phonological analysis of modern spoken Newari. Hale & Hale prepare a phonemic inventory of the Kathmandu dialect which is later modified in Hale and Srestacharya (1972).⁷ I reproduce below their modified version of the phonemic inventory in word-list orthography in Figure Five (a), and in phonemic symbols in Figure Five (b).

2.3.1: Obstruents

Stops in Newari exhibit the maximum number of distinctions in positions of articulation, and contrasts of voicing and aspiration. The system of contrasts that underlies stops in Newari can be analyzed in two ways: first, as a system in which both aspiration and voicing are contrastive; four series of voiceless and voiced aspirated and unaspirated stops are recognized -- this approach is called the 'unit phoneme analysis' (Hale 1969, 1970) -- second, as a system in which aspiration is not contrastive because the voiceless and voiced aspirated stops can be interpreted as syllable-initial clusters of stops and /h/, and not as unit-phonemes. This alternative analysis termed the 'cluster analysis' reduces the number of stops to eight:

p	t	c	k
b	d	j	g

Hale and Hale (1969) and Hale (1970) argue for the cluster interpretation, pointing out that /h/ occurs following all syllable-initial consonants except /s/, and the aspirate /h/ also occurs independently as a syllable-initial consonant. However, if non-suspect precedent patterns are required to establish initial CC-clusters, the only other CC-cluster in Newari occurs in loan words from Sanskrit, for example, prayog,

prəkar. The second segment of such clusters is phonetically [r], which is a variant of /d/ in native words, but is an established phoneme /r/ in borrowed words.

This cluster-analysis seems economical. However, since the phonology of Newari has not been extensively analysed, this apparently simple system of stops may lead to phonological complexity when phonological rules and constraints are worked out in detail. In this study the unit-phoneme system of analysis is recognized not only with regard to stops, but also with respect to liquids and nasals, until further investigation is conducted in this area.

Newari has only two fricatives. These are a voiceless alveolar fricative /s/ and a voiceless glottal fricative /h/.

Figure Five A.

Hale's Phonemic Inventory represented in word-list
Orthography

CONSONANTS	VOWEL
p t c k	i u
ph th ch kh	e (wa)
b d j g	(ae) a
bh dh jh gh	(āe) ā
m n (ng)	
l r	
lh rh	
s h w y	

Figure Five B

Hale's Phonemic Inventory represented in phonemic
symbols

CONSONANTS	VOWELS
p t c k	i u
p ^h t ^h c ^h k ^h	e o
b d j g	(ae)
b ^h d ^h j ^h g ^h	(āe) ā
m n (ŋ)	
l r	
l ^h r ^h	
s h w y	

2.3.2: Nasals

There are aspirated and unaspirated nasals in Newari. The cluster-analysis has also been suggested for /m/ and /n/, but as stated earlier, we consider them to be single phonemes. "ng," that is [], is parenthesized in Hale's phonemic inventory because in the Kathmandu dialect it does not occur in syllable-initial position. It occurs either in regressive assimilation of /n/ to / / before the velar stops /g/ and /k/, or as an optional velar release of long nasal vowels. In the Bhaktapur dialect, however, / / is a phoneme. According to Hale (1970:22), syllable initial [ny] in Kathmandu dialect appears to correspond to syllable-initial / / in Bhaktapur.

2.3.3: Liquids

Newari has both [r] and [rh] phonetically. In some native words, the phone [r] appears to be in free variation with /d/ in word-medial and word-final positions. [r] does not occur initially in native Newari words. For example,

/sidhele/ [sid ele] [sir ele] 'finish'

/m du/ [m du] [m r u] 'not be'

But in borrowed words [r] occurs in all positions. Hale (1970) is of the opinion that "if known loan words were

excluded from the analysis, there would be no phoneme /r/'' (1970:300). It is also possible that for some unsophisticated speakers, /r/ may not be a phoneme. /r/ also seems to have a free variant in [l] for uneducated speakers. For example, /rām/ is uttered both as [lām] and [rām] 'Proper Name Ram.' Other liquid sounds are /r/ and /l/ which we consider to be single unit-phonemes, too.

2.3.4: The Vowel System in Newari

Nasalization and length are the two contrasting vowel qualities in Newari. Hale (1973) states that nasalization "often has as its source a word-final nasal consonant which, in the absence of any following suffix, survives only as length and nasalization of the final vowel of the stem. The nasal may be either /m/ or /n/'' (1973:29). For instance, if a suffix is added to the word lākā 'shoe' to denote 'in the shoe' lākāmē, we note that the stem to which the locative suffix mē is added has a nasal consonant /m/ in a stem-final position; whereas the word-final vowel a is both nasalized and lengthened to [lākā:], and the /m/ is missing. This has led to the hypothesis that the original word for 'shoe' is lākām which in course of time lost the final nasal consonant when not followed by

a suffix, replacing it with nasalization and lengthening of the preceding vowel. This is not an individual occurrence. A great number of words in Newari have undergone this process. This is similar to the Indo-European process operative in Latin "virgo" (nominative) / "virginis" (genitive).

Newari, like many other languages of the South Asian area, has disyllabic VV patterns, that is, two vowel sequences which fuse into a single phonetic peak of resonance. Interpretation of VV patterns has proved somewhat problematical, because here again the same issue of determining whether these VV patterns are vowel sequences, or a single simple vowel is raised. Hale (1970:314-327) proposes an analysis in which he classifies these VV patterns into three kinds of monosyllabic VV-clusters:

- (a) geminate clusters such as /mi-i/ 'sell';
- (b) glide reduction clusters such as /bi-u/
'give' , and
- (c) coalescing clusters such as /b^ha-i/
'language'.

Length is viewed as clustering, on the evidence from word morphology.

Hale also recognizes disyllabic non-coalescing sequences, which he transcribes as /a.i/, /ə.i/, /aa.i/,

and /əə.i/. He comments that "if one insists that segment types are the basic units of phonology, a rejection of the cluster solution will obscure and complicate the morphology without appreciably simplifying the phonology" (1970:314).

Four contrastive degrees of vowel length have been observed in slow and distinct speech; but the actual number of contrasting vowel lengths is still undetermined.

2.4: Morphology

Typologically viewed, Newari possesses features characteristic of both analytic and synthetic languages. It shows several traits typical of isolating languages such as non-marking for plurality in verbs and inanimate nouns, presence of noun and adjective classifiers for numerals, absence of grammatical gender, etc. Its verbal bases are almost exclusively monosyllabic, for example, *bi* 'to give,' *du* 'to be, have', etc. It also abounds in words with primary roots of simple monosyllabic type such as *chha* 'you', *mi* 'fire', *khwā* 'face', etc.

On the other hand, it also possesses fully developed derivational and inflectional systems. Derivation of nouns and adjectives from verbs through suffixation may be considered a characteristic feature

of Newari morphology. Compounding is also a productive morphological process in this language. Inflection for person, tense, and number are marked by means of suffixes generally. My conjecture is that this is probably a later development under the extended influence of Sanskrit.

Newari can also be morphologically classed as an Ergative language, because the subject of a transitive verb is marked in the Ergative Case while the subject of an intransitive verb takes the same morphological marker as the direct object of a transitive, namely, the Absolutive Case (see Section 3.3 for discussion of the Ergative case).

In this section, a few major aspects of Newari morphology are described in terms of five traditional word classes: noun, pronoun, verb, adjective, and adverb.

2.4.1: Nominals

Sagar (1962) divides nominals into two notional categories: "animate" (*pravachak*), and "inanimate" (*apravachak*). This binary system of animate as opposed to inanimate is a significant distinction in Newari justifiable on morphological grounds. Animate nouns are marked for gender, number and case, while inanimate nouns are specifically indifferent to number but are marked for some gender and case distinctions.

2.4.1.1: Gender

The most important gender distinction in Newari is between animate beings and inanimate objects. Mha, and gu are the two basic morphological markers used as suffixes to express this distinction. Mha is suffixed to genitives, adjectives, and numerals qualifying animate nouns as well as verbal nominals as (1):

On the other hand, *gu* is suffixed to genitives and adjectives qualifying an inanimate object, such as in

(2):

- (2) (a) ji-gu safu 'my book' (gen)
 (b) tuyu-gu safu 'white book' (adj)

An interesting distinction is observed with respect to the use of numerals. In the case of an animate noun, mha is the sole morphological marker suffixed to the numeral as seen in cha-mha machā 'one child', jhi-mha machāta 'ten children'; but when a numeral qualifies an inanimate noun, a large variety of morphological markers are suffixed to qualifying numerals, based on the nature, size, and shape of the objects qualified, as follows:

- (3) (a) cha-pu me 'one song'
 (b) cha-khā chē 'one house'
 (c) cha-mā simā 'one tree'
 (d) cha-pho swā 'one flower'
 (e) cha-pā kamij 'one shirt'

pu , khā , mā , pho , and pā are some of the many numerical classifiers of inanimate objects in Newari. This demonstrates that all inanimate objects in Newari are classified in terms of bulkiness, round/flat, longish shape, large/small, paired ornaments or parts of the body, etc.

A numeral in Newari, therefore, always occurs

with a classifier suffix specific to the object qualified when accompanying an inanimate noun. Inanimate nouns are marked in this respect.

Animate nouns, on the other hand, are marked for natural gender, which is expressed in the following two ways: (i) by morphologically unrelated items such as in (4) :

- (4) (a) *doh* 'bull' *sā* 'cow'
 (b) *pāju* 'uncle' *male* 'aunt'

and, (ii) by adding qualifying affixes. Lexical items such as *bā* 'father', and *mā* 'mother' are used as prefixes to distinguish between male and female animals and birds; *bākhichā* is a male dog, for instance, while *mākhichā* denotes a 'female dog'. When unmarked for gender, *khichā* 'dog' denotes either sex.

For other common nouns such as *machā* 'child', words such as *mijā* 'man', and *misā* 'woman' may be prefixed to mark natural sex distinction (5) :

- (5) (a) *mijā-machā* 'manchild - boy'
 (b) *misā-machā* 'womanchild - girl'

A suffix *ni* is also used to specify females belonging to specific classes and castes or following particular occupations. For example, the female counterpart of *sāhu* 'businessman' is *sāhuni* 'businessman's wife or business woman'. While a man of Kshyatriya caste is

called Chetri , a Kshyatriya woman is called Chetrini.

2.4.1.2: Number

The Newari number system has singular and plural numbers. However, inanimate nouns do not undergo pluralization. Only animate nouns, pronouns, and adjectives can take plural suffixes. pi and ta are the most common plural markers. These suffixes are used in the following manner.

The suffix -pi is added to pronouns, attributive adjectives, nouns denoting kinship relations, and respectful forms while referring to culturally important personages.

(6)	Singular	Plural
(a)	ji 'I'	Ji-pi 'we'
(b)	bhi 'good'	bhi-pi 'good'
(c)	kijā 'brother'	kijā-pi 'brothers'
(d)	juju 'king'	juju-pi 'kings'

Note that -pi is the modern form of pani , which has now become obsolete. The suffix -ta is added to all other animate nouns.

(7)	(a) machā 'child'	machā-ta 'children'
	(b) khū 'thief'	khū-ta 'thieves'
	(c) misā 'woman'	misā-ta 'women'

Since inanimate nouns do not take plural markers, very often words like dakwo, fukka, samasta, etc., follow these nouns to express plurality. With question words like chu 'what' and su 'who', plurality is indicated by reduplication of the words: chuchu 'what all' and susu 'who all'. Animate nouns often are unmarked for plurality too when quantifiers such as all, many, several etc. precede the nouns. When adjectives occur with plural nouns, they take plural forms too:

- (8) (a) b̄hī-mha misā 'good woman'
 b̄hī-p̄i misā-ta 'good woman'
 (b) hārā-mha machā 'naughty child'
 hārā-p̄i machā-ta 'Naughty children'

2.4.1.3: Personal Pronouns

Personal pronouns in Newari are the following:

<u>Person</u>	<u>Singular</u>	<u>Plural</u>
First	ji (I) jhi (I and you) (incl)	ji-p̄i (we excl) jhi-p̄i (we incl)
Second	cha (you-informal) chi (you-formal) chala (Spec. formal)	chi-p̄i (you) chika-p̄i chala-pi
Third	wa (he/she-informal) ana (formal) wasakal (Spec. formal) wasapol (spec. formal)	i-pi (they) wasakal-p̄i wasapol-p̄i

Sex distinction is not observed in the Newari pronominal system. The list of various types of pronouns in Newari is as follows:

Relative Pronoun	mha (who-animate)
	gu (which-inanimate)
Demonstrative	thwa (this)
	wa (that)
Interrogative	su (who)
	chu (what)
Indefinite	su (nobody)
	chu (nothing)
Reflexive	tha: (self)

Pronouns follow basically the same system of case markings as nouns. We present here the full declension of the first person pronoun, ji, as an illustration:

<u>Cases</u>	<u>Singular</u>	<u>Plural</u>
Ergative	ji	jimisā
Absolute	ji	jipi
Dative	jita	jimita
Comitative	jike	jimike
Genitive	ji(mha)/(gu)	jimi (mha)/(gu)

(A full discussion of the case system is given in Section 3.3).

2.4.1.4: Verbal System

Jorgensen (1941) distinguishes three principal types of verbs in classical Newari: primary verbs,

verbal phrases, and derivatives. The same distinction is applicable to a taxonomic classification of major types of verbs in Modern Newari. Primary verbs are exclusively Newari in origin, and have monosyllabic roots. The verbal phrases are partially of Newari origin and partially borrowed. The derivatives occur in the forms of causatives and denominatives, the latter chiefly derived from Sanskrit loan words.

An interesting fact of Newari verbal systems is that different classes of verbs have different endings, partly identical in meaning but different in form. To illustrate, let us take three verbal roots: sil 'to wash', na 'to eat', and syā 'to kill', and examine the conjugational forms of these verbs in the simple past tense. Newari verbs are inflected for person and tense as in (9) through (11).

- (9) (a) ji sil-ā
 'I washed.'
- (b) chā sil-a
 'You washed.'
- (c) wā sil-a
 'He washed.'

- (9) (a) $\tilde{j}i$ nayā
 'I ate.'
- (b) $\tilde{ch}a$ nala
 'You ate.'
- (c) $\tilde{w}a$ nala
 'He ate.'
- (10) (a) $\tilde{j}i$ syānā̄
 'I killed.'
- (b) $\tilde{ch}a$ syāta
 'You killed.'
- (c) $\tilde{w}a$ syāta
 'He killed.'

Note the differences and similarities in verb endings. With the verb sil, the first person suffix form is -ā, and the second and third forms are identical -ā. With the verb na, the first person suffix is -yā̄, while the second and the third person suffix is -la. The verb syā̄, however, takes -nā̄ as its first person suffix and -ta as its second and third person forms. Note that these various forms serve an identical function of denoting simple past tense and person.

For the prediction of occurrent forms, therefore, the traditional approach has been to classify

Newari verbs into morphologically distinct classes on the basis of various criteria. For example, Jorgensen (1941) has arranged Newari primary verbs in four conjugations or classes: class I consists of verbs ending in -n, e.g., kana, bwana, dana, jwana; class II includes verbs which end in an unstable -l, e.g., kāla, tala, bila, hala; and class IV verbs end in an unchangeable -l, e.g., sula, nhila. Jorgensen also suggests that there is also a separate class of verbs, class V, consisting of denominatives and causatives. But Konow (1909) expresses uncertainty as to whether -n and -l belong to the base or the suffix in verbs such as wana, hala, and chwala. It is possible that the actual suffix (if only a, and -n, and -l) is part of the base.

Joshi (1928) considers the infinitive as the basic form in old Newari verb, and sets up different classes of verbs on the basis of rules necessary for changing the infinitival form (e.g. silegu 'to wash', nequ 'to eat', and svāygu 'to kill') into finite forms of the present, past, and the future tenses.

Sagar (1962:89-99) distinguishes eight classes of verbs, while Srestacharya (1964:26-35) recognizes seven classes of verbs in addition to the causative. Srestacharya (1963) has prepared a large list of Newari

verbs, arranged according to the vowels present in their monosyllabic base. These few bases combine with prefixes to form a large number of verbs. His study is particularly helpful in selecting inflectional classes of verbs based on the small set of verbal bases provided; however the morphological reasoning for his classification system is not clear. Lokman Singh (1955) recognizes four classes of verbs and a derivation for the causative.

Hale (1973) shows that "it is possible to predict all the regularly occurring forms of the verb, given only a single underlying phonological representation of the verbal base, together with a set of affixes and boundary symbols which is uniform for all verbs." (1973:279). He posits four major types of verbal bases in their underlying representations, and the underlying phonological differences among them are shown as follows:

	Consonant Finals	Vowel Finals
Short Base	IN - ends in n	II - ends in short vowel
Long Base	IL - ends in l	III - ends in long vowel

(Hale 1973:284, Table 10)

Then he works out a series of simple phonological rules

by which the base representations are mapped into the occurrent forms (see Hale (1973) for further details).

By capturing certain regularities of Newari phonology in terms of rules, Hale suggests a systematically adequate method of dealing with verb classifications without "setting up ad hoc morphological classes" or "making lexical entries with rule features for regular forms of the verb" (Hale 1973:284).

For regular forms of the verb, his system works very well, and furthermore appears to be the best solution so far proposed on differentiation of verb types. Therefore, his system will be followed in this dissertation.

Newari verbs are marked only for tense and person. The three tenses traditionally recognized in Newari are the present, past, and future. Future is the most clearly marked of the tenses while the present and past forms for different classes of verbs do not follow a consistent pattern. I present below verb conjugations for the verbs swa: 'to look;' and wan 'to go'. The plural verb forms are the same as the singular; only the pronouns change for number, e.g., jimi-sā̄ swayā 'we look/looked.'

swa 'to look'

<u>Person</u>	<u>Present</u>	<u>Past</u>	<u>Future</u>
First	ji swayā ⁸	ji swayā	ji swe
Second	chā swa:	chā swala	chā swai
Third	wā swa:	wā swala	wā swai

wan 'to go'

First	ji wanā	ji wanā	ji wane
Second	cha wā:	cha wana	cha wani
Third	wa wā:	wa wana	wa wani

Note that the second and the third persons within each tense are marked the same in all the tenses; only the first person markers differ in all three tenses in the singular. Note also that the present and past forms in the first person are the same.

For the copula du 'to exist', ('to have'), however, the present, and the past tense forms are identical for all three persons; and within a single tense, person markers are the same for all persons, as shown below:

du 'to be'

<u>Person</u>	<u>Present</u>	<u>Past</u>	<u>Future</u>
First	ji du	ji du	ji dai
Second	cha du	cha du	cha dai
Third	wa du	wa du	wa dai

This raises the question: are there distinct person markers suffixed to the verbs in Newari, or is

the first person the only marked form in the verbal system? An adequate answer is beyond the scope of this dissertation, so I leave the problem unresolved here.

Hale (1973) offers a sufficiently adequate method for determining specific tense and person markers for different verb categories. He attempts to discover the phonological regularities behind indeterminate and apparently irregular tense and person suffixes for different types of verbs by positing underlying representations for verbs, and working out transformational rules to generate the surface forms (see Hale 1973).

2.4.1.5: Adjectives

The three principal characteristics of adjectives in Newari are the following:

(i) If the adjectives qualify a noun denoting an animate being, the suffix mha is added to the Adjective , e.g. bhi-mha manu 'good man', tadhikamha manu 'tall man'. If the qualified noun denotes an inanimate object, the suffix gu is added to the adjective, e.g. chikidha-qu ché 'small house'.

(ii) There are three degrees of comparison: equational, comparative and the superlative conveyed by the underlined particles in the sentence below:

Equational degree of Comparison

- (12) wayā khwā-Ø duru thē tuyu
 he-gen face-abs milk like white
 'His face is as white as milk.'

Comparative degree

- (13) khusi-la:-yā sibē hiti-la:-Ø khwāū
 river-water-gen than tap-water-abs cold
 'Tap water is colder than river water.'

Superlative degree

- (14) Ritā-Ø jimi dakke yo-mha tata-Ø
 Rita-abs our most dear-clf sister-abs
 kha:
 be-p/impr
 'Rita is the dearest of our sisters.'

(iii) Adjectives in Newari can be negated individually in three ways. The negative prefix ma is added to an adjective consisting of a single consonant and a vowel, e.g., bhi 'good' when prefixed with ma becomes mabhi 'not good'. The negative affix ma is infixes in compound adjectives, e.g. naswā 'fragrant' has namaswā 'not fragrant' as its negative counterpart. Other adjectives are negated by using negative auxiliary verbs, e.g. tuyu 'white' can only be negated as tuyu maju 'white not happen/not white.'

2.4.1.6: Adverbs

Adverbs in Newari are basically of four kinds: time, place, manner, condition, and effect. Newari abounds in expressions (almost onomatopoeic) conveying the immediacy, duration, swiftness or slowness of manner and conditions of actions performed. Adverbs of condition and manner, furthermore, can be divided into three types: momentary, durational and continual. Examples are the following:

- (15) wa-Ø musukka nhil-a (momentary)

he-abs brief smile-p/3.

'He smiled a quick smile.'

- (16) wa-Ø musumusu nhil-a (durational)

he-abs long smile-p/3

'He smiled for a long time.'

- (17) wa-Ø musuhā nhil-a

he-abs slowly smile-p/3 (continual)

'He smiled a slow smile.'

The majority of actions and movements in Newari are expressed by use of specific action-associated adverbs of manner and condition, e.g.,

- (18) wā khū-yāta bhukubhuku dā-la

he-erg thief-dat hard beat-p/3

'He beat the thief with blows continuously.'

- (19) wā khū-yāta bhwākka dā-la
 he-erg thief-dat one-blown beat-p/3
 'He gave the thief a blow.'
- (20) wā khūyāta chyārākka dā-la
 he-erg thief-dat with-a-slap beat-p/3
 'He slapped the thief.'

2.5: Conclusion

In this chapter, I have followed very closely the morphological descriptions provided in traditional grammars of Newari. In the following sections, I will examine the basic constituent structure of this language, focusing on those aspects of the syntactic categories such as the noun, the verb complex, the modifiers ,and the adverb, pertinent to my discussion on negation in Newari. This will provide the reader with a point of comparison on how working within the syntactic framework of the RG model, I have succeeded in capturing those generalizations about the syntax and semantics of negation in Newari in the simplest terms possible. Traditional grammars of Newari suffer from two basic inadequacies - one, a tendency to adopt in its entirety the descriptive apparatus used in grammars of Sanskrit, and force the Newari language into that model, regardless of whether linguistic characteristics which

exist in Sanskrit actually occur in Newari or not; and two, a lack of scientific analytic tools and an independent methodology with which to approach the language. This will become obvious as I proceed with this investigation, and show how the inaccuracies and the inadequacies one encounters in traditional grammars of Newari can be eliminated when a rigorous framework such as the RG model is followed.

Notes on Chapter Two

¹Hemraj Shakyavamsha (1953) sets out no fewer than nine different types of Newari scripts in his book Nepal Lipi Samgraha - Ranjana, Bhujimol, Kumol, Kuemol, Gromol, Pocumol, Himol, Litumol and a ninth script described as Thaukanhe Prachalit 'current today', that is, Devanagari script.

²Non-Pronominalized languages are those with comparatively fewer case and number distinctions, that is, simpler grammatical system.

³Chatterjee, quoted by Malla (1978).

⁴Also note his article "Linguistic Remarks on the Verb in Newari" in Acta Orientalia 14 (1936:280-285).

⁵Newari is known as Nepal Bhasa among the native speakers.

⁶See Malla's article "Jhigu Bhay, Jhigu Khago" in Sikamiya Swane (1978:218-230).

⁷Kansakar's (1979) Ph.D. dissertation on the generative phonology of Kathmandu Newari must be mentioned at this point. However, this study came to my attention only after I defended my thesis. Therefore, I have not referred to this work in my description of the phonology of Newari.

⁸swa: and wā: are used often as shortened forms for swala and wana respectively.

CHAPTER THREE

CONSTITUENT STRUCTURES OF NEWARI WITHIN RG FRAMEWORK

3.0: Introduction

This chapter analyzes the phrase structure of Newari. In Residential Grammar (RG), constituency is represented in three levels of hierarchical structure. In order to determine the various levels of phrasal hierarchies, we must first examine the basic word order, syntactic categories, case system, and the internal structure of the noun phrases in Newari. The structure of the verb complex is discussed in chapter five because of its crucial relevance to the syntax of negation.

3.1. Basic Word Order

Word order in Newari appears to be rather unrestricted, compared to that of English, when we consider a sentence such as (1a) in its six possible word order combinations, all of which are grammatically acceptable:

- (1) (a) Machā̄ safu-∅ kā-la
 child-erg book-abs take-p/3
 'The child took the book.'
 (b) Machā̄ kā-la safu-∅
 (c) Safu-∅ machā̄ kā-la
 (d) Safu-∅ kā-la machā̄
 (e) Kā-la machā̄ safu-∅
 (f) Kā-la safu-∅ machā̄

Although all the variants in (1) are grammatical, I will argue that the basic word order is SOV, that is, subject, object, verb (as shown in 1a), and that (1b-f) illustrate positional variations which indicate focus, emphasis, or topic. Sentences (1e and f) with verbs in initial position are acceptable only as responses to questions seeking confirmation, and kā-la in S-initial position is equivalent to Yes! (affirmation) in English. As a result, the wide range of

acceptable orders of constituents within a sentence in Newari reflects two kinds of word orders in this language: (a) Normal word order (basic) and (b) Topicalized word order.

There are several reasons for analyzing Newari as a verb final language. First, the majority of main clauses have the verb in final position. Second, in subordinate clauses, the verb is always clause-final. Consider the position of verbs within Ss (2-3) with embedded verbal complements:

- (2) Jī Rāmā machā-yāta safu-∅ byu-gu¹ kha-nā
 I-erg Ram-erg child-dat book-abs give-sub see-p/l
 'I saw Ram give the book to the child.'
- (3) Jī Rāmā macha-yata safu-∅ bi-la
 I-erg Ram-erg child-dat book-abs give-p/3
 dhakā dha-yā
 that say-p/l
 'I said that Ram gave the book to the child.'

In the embedded sentences above, the verbs occupy S-final positions - byu-gu in (2), and bi-la in (3). The matrix verbs following them also occupy S-final positions. The verbs of the embedded clauses are attached to the left of the matrix verbs - byu-gu kha-nā (2), and bi-la (dhakā) dha-yā (3).² This is typologically characteristic of verb-final languages

(Greenberg 1963). Thus, in both embedded and matrix sentences, the verb generally occurs in S-final position.

When the verbs of subordinate sentences occur in non-final positions, ungrammatical sentences are produced as in (4) and (5), supporting the hypothesis that word order is not without restrictions (cf. (1e) and (1f)):

- (4) * \tilde{Ji} byu-gu Rāmā machā-yāta safu-∅ kha-nā.
 (5) * \tilde{Ji} Rāmā dhakā machā-yāta bi-la safu-∅ dha-yā.

Matrix sentences, as noted, may have verbs fronted in confirmatory response (6b) to a question (6a):

- (6) (a) Chā Rāmā machā-yāta safu-∅
 you-erg Ram-erg child-dat book-abs
 byu-gu kha-nā lā?
 give-sub see-p/2 Q
 'Did you see Ram give book to the
 child?'
 (b) Kha-nā $\tilde{jī}$ Rāmā machā-yāta safu-∅
 byu-gu
 'Yes! I did see Ram give book to
 the child.'

Note that kha-nā jī is equivalent to 'Yes! I did see.' in English, and not merely 'I saw.'

Next, consider Relative Clause constructions:

- (7) (a) Rāmā machā-yāta byu-gu safu-Ø
 'Book which Ram gave to child.'
- (b) Machā-yāta safu-Ø byu-mha³ Ram
 'Ram who gave book to child.'
- (c) Rām-yāke safu-Ø kā-mha machā⁴
 Ram-com book-abs take-rel child
 'Child who took book from Ram.'

The word order in these embedded relative structures also shows the verb as S-final. Embedded clauses in Newari are marked at clause-final position, and the relativizers gu and mha are marked on the S-final verbs. It is not possible to reverse the order in the relative clause constructions above without losing the interpretation of relativizing safu, Ram, and machā. For instance, the following phrases (8a,b,c) are unacceptable as relative constructions:

- (8) (a) *Safu Rāmā machā-yāta byu-gu
 (b) *Rām machā-yāta safu byu-mha
 (c) *Machā Rām-yāke safu kā-mha

Note also that the final nouns in (7), namely, safu, Rām, and machā constitute parts of the matrix sentences, and that the relative clauses themselves have verbs in clause-final positions directly before the head of the relative. Further examples from Cleft sentences also indicate that the embedded parts of

the sentence always have verbs occurring S-finally:

- (9) (a) Ji gana wanā dhāsā chē wanā
 I-abs where go-p/l as/for home-loc go-p/l
 kā⁵
 int
 'Where I went was (go) home, you know.'
 (b) wā chu yā-ta dhāsā me hā-la
 He-erg what do-p/3 as/for song sing-p/3
 kā
 int
 'What he did was sing a song you know.'

Thus, embedded structures in Newari, in which the word order is most restricted, exhibit a consistent S-final pattern for the verb.

Another consistent pattern that emerges in a study of the embedded structures is that the sentence initial position is normally occupied by the subject when there is one. Observe the following examples:

- (10) (a) Jī Rāmā safu-Ø ha-la dhakā
 I-erg Ram-erg books-abs bring-p/3 that
 syu
 know-p/l
 'I know that Ram brought books.'

(b) *Jī wā dhā-gu kha dhāthē kha*
 I-erg he-erg say-rel talk true was
dhakā chwa-nā
 that think-p/l

'I thought that what he told me was
 really true.'

(Literally: I thought that the talk
 which he related was really so.)

The subject of embedded clauses occurs in non-initial position only when some other non-verbal element in the sentence is being focused; however, if the only other element in the embedded clause is a verb, then the subject of the embedded clause must be initial. In (11a), the complement of the embedded verb, i.e., "safu," is focused; in (11b), there is no possibility for having "wā" in any other position than before "dhā-gu," because the clause contains only two words, the subject "wā" and the verb "dhā-gu":

(11) (a) *Jī safu-Ø Rāmā ha-la dhakā syu.*

(b) **Jī dhā-gu wā khā dhathe kha dhaka chwa-nā*

To summarize, subject is S-initial in Newari and the verb is S-final. Subjects can occur non-initially in main and subordinate clauses, but only for focus or emphasis. Within this normal word order, there are two orders for direct object (DO) and indirect object (IO):

S IO DO V and S DO IO V. Although the two orders appear interchangeable, there is evidence in interrogative and negative sentences that S IO DO V is the basic word order.

Interrogative sentences in Newari exactly reflect the normal word order of declarative type sentences, as shown in (12) and (13). There is no subject-auxiliary inversion or fronting of the question words as in English. Consider the following pairs of question-answer sentences in Newari:

- (12) (a) Chā Rām-yāta chu bi-yā?

You-erg Ram-dat what give-p/2

'What did you give to Ram?'

- (b) Jī Rām-yāta safu-Ø bi-yā

'I gave (the) book to Ram.'

- (13) (a) Chā sui-ta safu-Ø bi-yā?

You-erg who-dat book-abs give-p/2

'To whom did you give (the) book?'

- (b) Jī Rām-yāta safu-Ø bi-yā

'I gave (the) book to Ram.'

If the DO precedes the IO, then there is a definite emphasis on the DO and the focus of the question falls on the DO as in (14a) where uppercase signifies emphasis; however, focusing of the IO requires placing it in S-initial position as in (14b). This

suggests that the basic position of IO must be before the DO.

- (14) (a) Chā̄ SAFU-∅ sui-ta bi-yā?
 You-erg book-abs who-dat give-p/2
 'To whom did you give THE BOOK?'
 (b) RĀM-YĀTA chā̄ chu bi-yā?
 Ram-dat you-erg what give-p/2
 'What did you give TO RAM?'

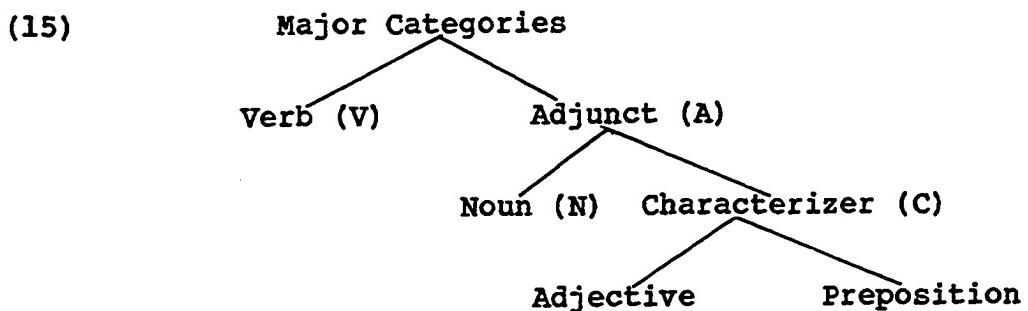
Actually, as we will see below, many speakers feel that there are two possible focusing positions for the DO (S DO IO V or DO S IO V) but only one for IO (IO S DO V). Newari also permits S IO V DO and S DO V IO orders, but in these instances the DO and IO, respectively, are added to the sentence almost as afterthoughts, not for focus or emphasis. I should add, however, that judgements concerning the declarative order of DO and IO are very subtle; not all speakers feel that the order DO IO places emphasis on the DO in declaratives.

A similar pattern is observable in negative sentences. When the scope of negation extends to DO, it generally occurs before the IO; but for the IO to be under the scope specifically, it must occur in S-initial position. My conjecture from this is that since IO already occupies the initial position in an IO DO order,

it has primary focus and emphasis when it occurs at the beginning of the sentence. DO, on the other hand, can occur in a position before IO, as well as initially, to indicate focus. These considerations lead me to assume that S IO DO V is the basic word order in Newari.

3.2: Syntactic Categories

RG introduces a new division of traditional syntactic categories by distinguishing basically between two major syntactic categories - Verb (V) and Adjunct (A). Adjunct is further subdivided into Noun (N) and Characterizer (C). The category characterizer subsumes all other syntactic categories that are neither verbs nor nouns. This syntactic categorization is shown below (Binkert 1984:7):



In fact, RG provides an exclusively syntactic feature matrix for all the traditional parts of speech, distinguishing one from the other in terms of syntactic distinctive features (see Binkert, Tables 1 & 2, pp.72,

194-195, reproduced here in Appendix A).

In this section, I propose to show how this distinction drawn in RG between Verb and Adjunct is relevant to syntactic categorization in Newari and may be justified on both morphological and syntactic grounds.

3.2.1: Morphological Basis

Verbs and Adjuncts carry mutually exclusive inflectional markers: (1) Verbs are inflected for tense and person, (2) Nouns⁶ and Adjectives carry number,⁷ case and classifier markers⁸ in that order, (3) the sentential negative morpheme ma- attaches itself to only the verb as a prefix. Observe the following sentences which illustrate the morphological distinctions between Verb and Adjunct.

- (16) Ji kijā-p̄i-ta bālā-gu safu-∅
 I-erg brother-pl-dat good-clf book-abs
ma-bi-yā
 neg-give-p/l
 'I did not give good book to (my) brothers.'

- (17) *Wā Rām-yā kijā-pi-ñi-gu chē-yā*
 He-erg Ram-gen brother-pl-gen-clf home-gen
nhyane pukhu-Ø deka-la
 front pond-abs build-p/3
 'He built a pond in front of Ram's
 brothers' home.'

3.2.2: Syntactic Basis

3.2.2.1: Adjunct and Verb

Syntactically, Adjuncts enjoy flexibility in the number of syntactic positions they can occupy in the sentence structure, whereas Verb is highly restricted to its S-final position except in two specifically contextual situations: to indicate focus, verbs may occur initially in a question seeking confirmation and in a response to such a question, as we have seen above in (6). Adjuncts (NP, ADJ.P., ADV.P.) can occur either initially or medially within the sentence indicating shifts of focus. Two examples are provided below to illustrate this:

- (18) (a) $\tilde{Mā}-yā$ lāgi $\tilde{jī}$ reshami parsi-∅
 Mother-gen for I-erg silk sari-abs
 nyā-nā
 buy-p/l
 'For mother, I bought a silk sari.'
 (b) Reshami parsi-∅ $\tilde{jī}$ $\tilde{mā}-yā$ lāgi
 Silk sari-abs I-erg mother-gen for
 nyā-nā
 buy-p/l
 'Silk sari, I bought for mother.'

3.2.2.2: Noun and Characterizer

With reference to the distinction between characterizer and noun, two word order considerations are relevant. First, demonstratives, and adjectives always precede the head noun, as in (19) and (20):

- (19) (a) $\tilde{bālā}-mha$ misā
 beautiful-clf woman
 'beautiful woman'
 (b) *misā $\tilde{bālā}-mha$

- (20) (a) thwa bālā-mha misā
 this beautiful-clf woman
 'this beautiful woman'
 (b) *thwa misā bālā-mha
 *misā thwa bālā-mha
 *misā bālā-mha thwa

Second, categories such as quantifiers and numerals can either premodify or postmodify the nominal head. If a numeral cha-mha 'one' immediately precedes the head noun as in (21), a specific number of one woman as against two or several women is understood. If the numeral follows the head noun as in (22), a partitive reading 'one woman' out of several women is implied. Sometimes, a non-specific 'a' is also understood when the numeral postmodifies a head noun.

- (21) Ana cha-mha misā-Ø danā chwa-na
 there one-clf woman-abs stand prog-p/3
 'One woman is standing there.'
- (22) Ana misā-Ø cha-mha danā chwa-na
 there woman-abs one-clf stand prog-p/3
 'One (of) woman is standing there.'

With quantifiers too, a similar distinction is

observed. Note that it is not the distance of the quantifier from the head noun that is important; rather, it is whether the quantifier premodifies or postmodifies the head noun that signifies the distinction between the partitive and non-partitive meaning of the quantifier.

- (23) (a) Pyākhā-Ø swo-wa-p̄i dakwo manu-tā
 Dance-abs see-come-pl all man-pl
 chē wa-na
 home-loc go-p/3
 'All men who came to see the dance went
 home.'
- (b) Dakwo Pyākhā-Ø swo-wa-p̄i manu-tā
 chē wa-na
 'All men who came to see the dance went
 home.'
- (c) Pyākhā-Ø swo-wa-p̄i manu-tā dakwo
 chē wa-na
 'All (of) men who came to see the dance
 went home.'

Thus, characterizers -- determiners and adjectives -- always precede the head of noun phrases, whereas numerals and quantifiers either precede or follow the head noun with a change in meaning.

In Newari, an important distinction can be drawn between nominal adjuncts and verbal adjuncts. Nominal

adjuncts include characterizers (determiners, adjectives) which premodify the head noun as demonstrated in the examples above (19a) and (20a), as well as quantifiers and numerals which premodify and postmodify the head noun as discussed above in sentences (21-23). Verbal adjuncts, on the other hand, include adverbials of time, place, and manner which enjoy the maximum flexibility in movement, and can 'float' around to any position within the sentence, depending on the focus and emphasis that is intended to be conveyed within the sentence. See examples below:

- (24) (a) Ji-Ø chanthāy kane we
 I-abs your place tomorrow come-np/l
 'I'll come to your place tomorrow.'
- (b) Ji-Ø kane chanthāy we
 'Tomorrow, I'll come to your place.'
- (c) Chanthāy ji kane we
 'To your place, I'll come tomorrow.'
- (d) Kane ji chanthāy we
 'Tomorrow, I'll come to your place.'

Adverbials of manner/condition such as sumka 'quietly', bistāra 'slowly', yauka 'easily', etc., also enjoy the same flexibility of position within the sentence.

This brief examination of syntactic categories present in Newari justifies the fundamental distinctions drawn in RG between verb and adjunct, and between characterizer and noun. The specification of details of how each category can be distinguished from the other in terms of syntactic features will be provided at the end of this chapter, after determining the different levels of syntactic categories in Newari, and exploring the case system and the internal structure of the noun phrase in this language.

3.3: Determination of Levels

In the X' convention, first suggested by Chomsky (1970), and later extensively elaborated by Jackendoff (1977), cross-categorial generalizations, i.e. generalizations that operate across major syntactic categories like the active/passive relation in an S and an NP, are captured without reference to any syntactic category. "X" is viewed as any specific syntactic category, and a uniform three-level hypothesis (X''' , X'' , X') is proposed to represent each category (Jackendoff 1977: 36-37). This allows for generalizing a cross-categorial relation such as active/passive across X''' , since X''' embraces both V''' (S) and N''' (NP); thereby, it eliminates the need for expressing such relations individually in terms of particular syntactic categories (S or NP). RG adopts Jackendoff's three-level hypothesis, introducing several significant modifications and improvements which handle problems encountered in Jackendoff.

RG's attempts to account for data not sufficiently well treated in Jackendoff lead to the introduction of two new phrase structure mechanisms, not present in Jackendoff's PS schema: (a) the slash notation, and (b) a recursive rule schema.

Binkert surveys a large number of categories on different X levels which occur in constructions both to the left and right of a head, such as available teachers/ teachers available, quite far down the street/ down the street quite far. Current Transformational grammar offers no adequate description of such constructions. RG proposes to account for these by introducing a new abbreviatory device, the slash notation in phrase structure schemata, "which indicates items that are optional and that can occur on either side of a head X." For example, (25a) abbreviates (25b) (See Binkert 1984:9).

- (25) (a) $X'' \rightarrow / A''' / - X'$
 (b) $X'' \rightarrow A''' - X' - A'''$
 $X'' \rightarrow A''' - X'$
 $X'' \rightarrow X' - A'''$
 $X'' \rightarrow X'$

Both "A" positions can be filled in (25b) in the same phrase, e.g., "[quite far - down the road - near Bill's House]" and "[enthusiastically - sliced the salami - evenly]"; thus, (25b) is not used in RG as a disguised movement transformation. Positions which occur to the right of the head are referred to as "posthead" positions, and those which occur to the left as "prehead." Positions to the immediate left and right

of the head are referred to as the "first positions" and those adjacent to first positions as "second positions" (Binkert: 11).

Another important mechanism introduced in RG to account for structure such as "the pretty little yellow house", "the bird's migration from Canada to South America over the Rockies", in which the sequence of categories can occur infinitely at each level of PS, both to the right and left of the head, is provided in a rule such as follows:

$$(26) \quad x^n \rightarrow x^m, \text{ where } m < \text{ or } = n$$

This rule permits a symbol to be rewritten as a string beginning and ending with itself, and introduces recursion of each x level into the PS directly. This solves what Binkert calls the "Level Recursion Problem." TG does not allow such rules. On the basis of these two mechanisms, RG proposes one basic PS schema as follows:

$$(27) \quad x^n \rightarrow /A''' - A'''/ - x^m$$

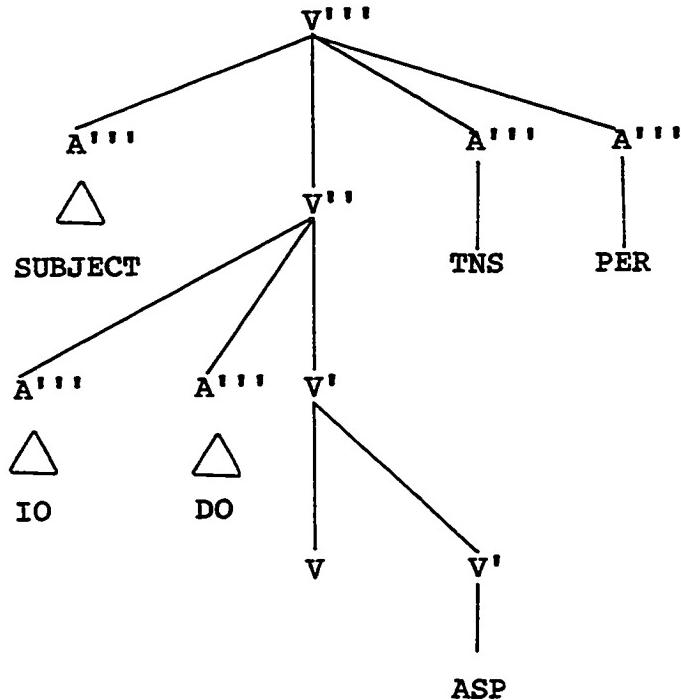
where $m < \text{ or } = n$ and $A = [+ \text{Adjunct}]$

Given this formalism, which is fully discussed and justified in Binkert (1984), a number of options become possible for the syntactic description of individual languages. Binkert proposes several formal universals in the sense of Chomsky (1965) which are operative across all languages; beyond this, however,

each language must be examined in its own terms. In this section, I will present some structures for Newari which an analysis of the language seems to demand. These structures will be discussed and justified as we proceed.

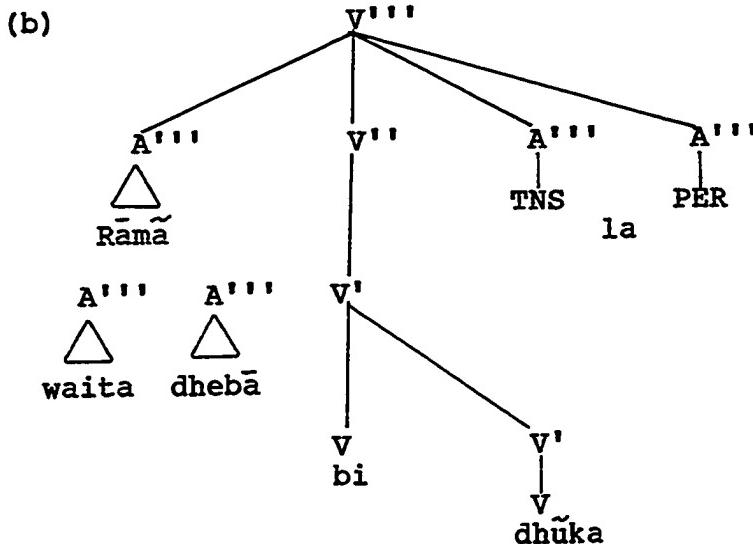
An investigation of Newari data within RG's basic PS rule schema shows that the three different levels (X''' , X'' , X') above X posited in RG for English are also necessary to account for the relevant structural differences among phrasal hierarchies in Newari. The basic structure of a sentence (V''') with expansions of V'' and V' is shown in (28). A stands for Adjunct.

(28)



As an example, a tree diagram for sentence (29a) in Newari is provided below in (29b):

- (29) (a) Rāmā̄ wai-ta dhebā-∅ bi dhūka-la
 Ram-erg he-dat money-abs give perf-p/3
 'Ram has given him money.'



We claim that the subject appears on the highest level V''' as a prehead resident, an adjunct. The IO and DO occur as prehead residents on the V'' level, the DO in the first prehead position, and the IO in the second. Our reasons for establishing this structural distinction between subject and object on different levels are based on the following evidence.

First, consider anaphoric substitution in (30):

(30) Rāmā waita dhebā-Ø bi-la tara

Ram-erg he-dat money-abs give-p/3 but

jī athe ma-yā-nā

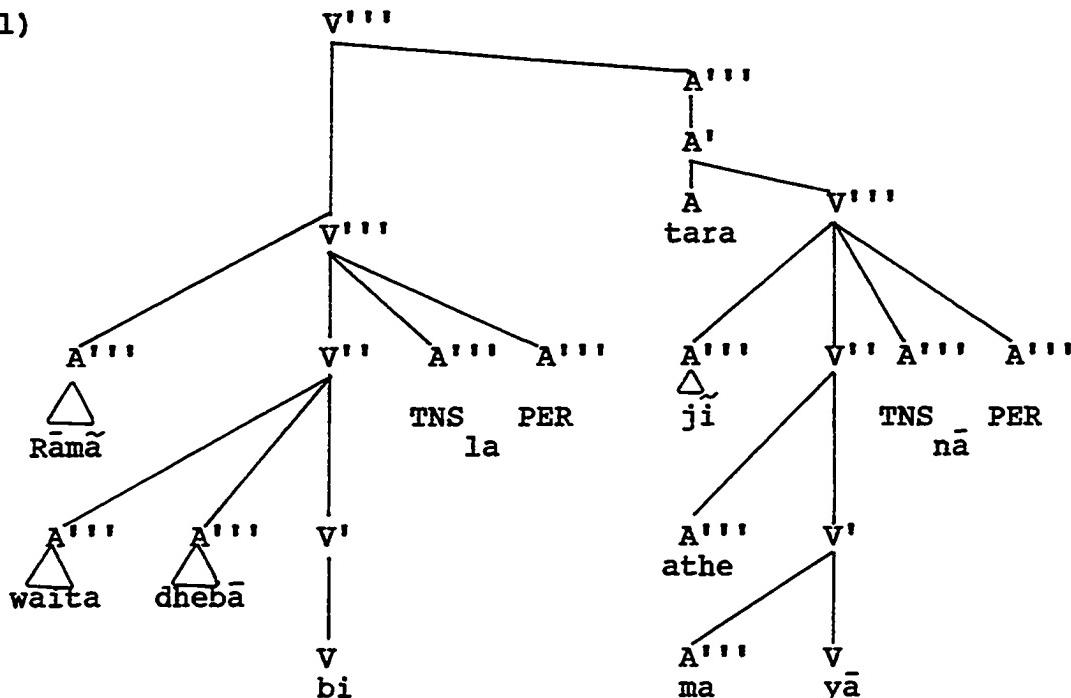
I-erg so neg-do-p/l

'Ram gave money to him but I didn't do so.'

In (30), the anaphoric phrase athe ma-yā-nā

refers to the entire V'' and V' levels, excluding the subject as shown in diagram (31).

(31)



This structure (31) indicates that syntactically the subject does not operate on the same level as the object: an anaphoric substitution can replace the V'' level including the object and excluding the subject as in (30).

The operation of topicalization further confirms this. If topicalized, the subject occurs at the end of the sentence as in (32a) and (32b), but the IO and DO do not, as shown in (33a) and (33b).

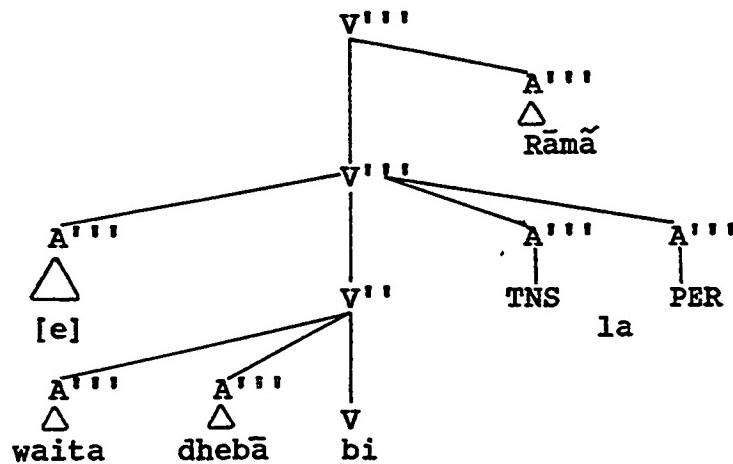
- (32) (a) wai-ta dhebā-Ø bi-la Rāmā
 he-dat money-abs give-p/3 Ram-erg
 'Ram gave him money.'
- (b) Thana wa-la Rāmā mhasyu-mha manu-yā
 here come-p/3 Ram-erg know-clf man-gen
 kijā-o
 brother-abs
 'The brother of the man whom Ram knows
 came here.'
- (33) (a) *jī̄ kijā-yāta kya-nā tasbir-Ø
 I-erg brother-dat show-p/l picture-abs
 'Picture, I showed to (my) brother'.
 (b) *tasbir-Ø ji kya-nā kijā-yāta
 'To (my) brother, I showed the picture'.

Sentences (33a) and (33b) become grammatical only if there is a heavy pause before the final phrases ("tasbir" in (33a) and "kijā-yāta" in (33b)), in which case those phrases are added to the sentence almost as an afterthought.

RG accounts for the topicalization by binding the topicalized element to an empty node [e] which specifies its untopicalized (basic) position (Binkert Chapter Five); consequently, in RG no movement is involved, and the structure for (32a) is directly generated by rule (27). In a manner similar to this,

RG eliminates all movement and deletion transformations like WH-fronting, Topicalization, Adverb Preposing, Gapping, Comparative Deletion, etc. (Binkert Chapter Five). The RG structure for (32a) is (34).

(34)



We may summarize topicalization as follows: basic word order is S IO DO V; topicalized V''' adjuncts, in particular, the subject phrase, occurs in S-final position, whereas topicalized V'' adjuncts occur further forward in the sentence than their basic position. Since IO is the leftmost element of V'' in basic order, topicalization of the IO requires placing it in S-initial position before the subject. On the other hand, the DO has two places it can occupy further forward from the basic word order, namely, S DO IO V and DO S IO V. Both of these positions are possible for topicalized direct objects.

The subject can also be absent under identity with some other constituent elsewhere in the sentence. In fact, the most frequently omitted constituent in Newari conjoined sentences is the subject noun under identity. This is so because the person marker in the verb is governed by the subject, thereby decreasing the possibility of ambiguity or vagueness, even if the subject is omitted in the conjunct. Observe sentence (35):

- (35) *Ji̤ phogī-yāta dhebā-Ø bi-yā tara machā-yāta*
 I-erg beggar-dat money-Ø give-p/l but child-dat
 dhebā-Ø ma-bi-yā
 money-abs neg-give-p/l
 'I gave money to (the) beggar but did not give
 money to (the) child.

On the basis of these arguments, I conclude that the subject exists on the V''' level, and that the IO and DO occur on the same level V'', for though they occur in the same kinds of constructions, e.g., topicalization, subjects and complements (DO and IO) demonstrate different syntactic behavior. Further justification of these conclusions follow in Chapters Five and Six.

Tense and person occur as posthead characterizers on V''' level, because it is the subject

which determines the person marker on the verb, and tense covers the entire sentence, (cf. (28)).

With reference to V' level, aspect is established as a posthead characterizer. Verb and aspect form a tightly bound constituent despite positional variation. Ungrammatical sentences are generated if the verb is separated from the aspect as in (36) and (37).

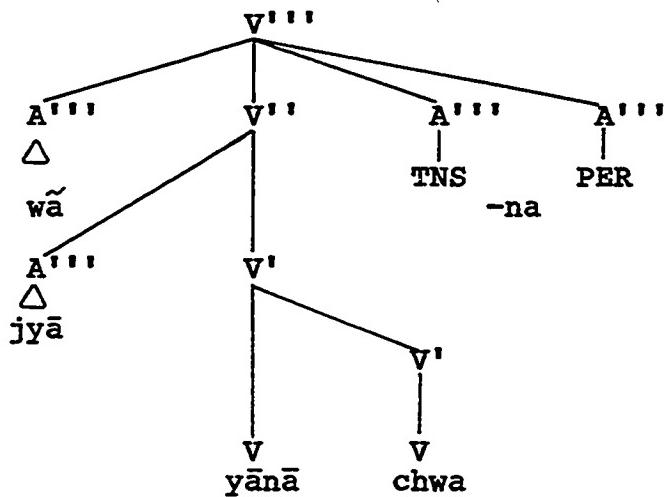
- (36) *wā̄ yānā jyā-∅ chwa-nā
 he-erg do work-abs prog-p/3
 'He do work-ing.'

- (37) *wā̄ sidheke jyā-∅ dhūka-la
 he-erg finish work-abs perf-p/3
 'He finish work-ed.'

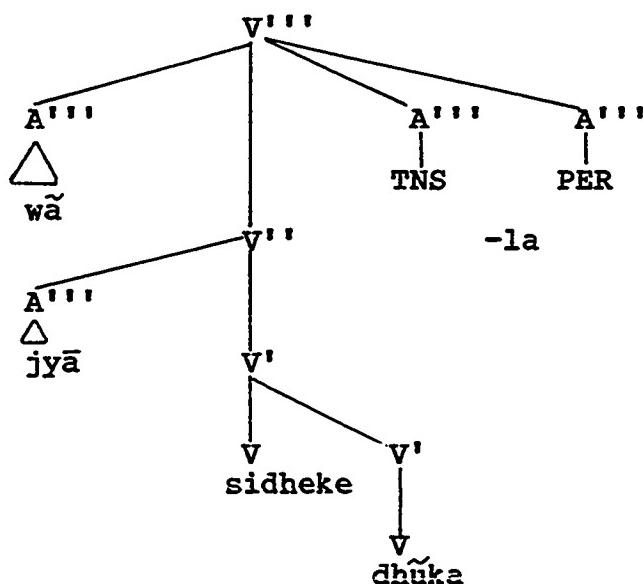
The correct forms for the ungrammatical sentences (36) and (37) are (38) and (39), which have the diagrams (40) and (41), respectively.

- (38) wā̄ jyā-∅ yānā chwa-na
 (39) wā̄ jyā-∅ sidheke dhūka-la

(40)



(41)



In Newari, aspect forms can not be separated from the main verb. Ungrammatical sentences are produced if the aspect is left intact with the verb deleted. See (42) and (43) below:

- (42) *wā́ jyā-Ø yānā́ chwa-na tara jí jyā́ ma-chwa-nā
 'He is doing work but I not -ing work.'

- (43) *wā-Ø chḗ wane dhūka-la tara ji-Ø
 he-abs home-loc go perf-p/3 but I-abs
 chḗ ma-dhūni
 home-loc neg-perf-p/l

'He has gone home but I not -en home.'

Further discussion of the verb phrase will follow in Chapter Five on the analysis of the syntax of negation in Newari, where I will argue that dhun is a modal verb, not an aspect form and that TNS and PER are fused as one element, and therefore should be considered as one node.

3.4: Case System in Newari

Newari possesses a diverse case marking system in the form of inflectional suffixes attached to NPs. We have ascertained eight principal cases to be basic in Newari, viz., Ergative, Absolutive, Genitive, Locative, Dative, Comitative, Instrumental, and Elative. A very important question to consider with reference to cases is the determination of the kind of function which case performs in this language, that is, to examine whether cases are syntactically determined and fulfil a syntactic function, or whether they perform purely

semantic functions or represent a combination of both functions.

But, first let us look at the types of morphological case markers and what they represent.

The Ergative case, covering the subject of transitive verb is represented by "-nā", or an oblique stem ending in a long nasal vowel "~". "-sā" is added to the plural forms of nouns in the ergative case:

- (44) Rāmā tarkāri-Ø ha-la
Ram-erg vegetables-abs bring-p/3

'Ram brought vegetables.'

- (45) Mas-te-sā jā-Ø na-la
child-pl-erg rice-abs eat-p/3
'Children ate rice.'

The Absolutive case marks the subject of an intransitive verb and the direct object of a transitive verb, and is represented by an uninflected stem not distinguished by any suffix, that is, by Ø marker.

- (46) Ji-Ø wa-nā
I-abs go-p/l
'I went.'

- (47) Jī safu-Ø ka-yā
I-erg book-abs take-p/l
'I took the book.'

An uninflected stem followed by -yā in the singular, and -ni in the plural mark the Genitive case:

- (48) Kijā-yā pāsā-p̄i landan-e wa-na
brother-gen friend-pl London-loc go-p/3

'Brother's friends went to London.'

- (49) Kijā-p̄i-ni pāsā-p̄i landan-e wa-na
brother-pl-gen friend-pl London-loc go-p/3

'Brothers' friends went to London.'

The morphological form for the Locative case is an oblique stem followed by -e, or by a lengthened final -i.

- (50) Mas-ta-Ø kothā-e du
child-pl-abs room-loc be-p/3

'Children are in the room.'

- (51) Dev-Ø Kāthmāndu-i wa-na
Dev-abs Kathmandu-loc go-p/3

'Dev went to Kathmandu.'

The dative case marker consists of an uninflected stem followed by -yāta in the singular form and -ta in the plural.

- (52) Ritā tatā-yāta dhā-la
Rita-erg sister-dat tell-p/3

'Rita told sister.'

(53) Ritā tata-pī-ta dhā-la

Rita-erg sister-pl-dat tell-p/3

'Rita told sisters.'

The Comitative case is marked by an uninflected stem followed by -yāke in the singular and -ke in the plural.

(54) Jī pāsā-yāke dheba-∅ ka-yā

I-erg friend-com money-abs take-p/1

'I took money from a friend.'

(55) Jī pāsā-pī-ke dhebā-o ka-yā

I-erg friend-pl-com money-abs take-p/1

'I took money from friends.'

The Instrumental case marker is either "-nā" , or an oblique stem ending in a long nasal vowel "~" .

(56) wā lhātā jā-∅ na-la

he-erg hand-ins rice-abs eat-p/3

'He ate rice with (his) hand.'(not with a spoon)

The Elative case is also marked by a long nasal vowel "~" .

(57) Machā-∅ khātā kutūwa-la

child-abs bed-elt fall-p/3

'The child fell from bed.'

There are no plural forms for the Instrumental and Elative cases because Inanimate nouns in Newari are not marked for number.

To summarize, the morphological forms for these eight principal cases in Newari are listed below for ease of reference.

<u>Cases</u>	<u>Markers for Case-endings</u>	
	<u>Singular</u>	<u>Plural</u>
Absolutive	Ø	Ø
Ergative	-nā~, long nasal vowel~~~	-sā~
Dative	-yāta	-ta
Comitative	-yāke	-ke
Locative	-e/-i	Ø
Genitive	-yā	-ni
Instrument	-nā~, long nasal vowel~~~	Ø
Eitative	long nasal vowel~~~	Ø

Turning to the question of what function case fulfills in the sentence structure, I claim that cases such as the ergative and the absolute are purely syntactic cases, while other cases such as the genitive, dative, instrument etc., have semantic uses in Newari. According to Binkert (191): "When the use of a case is occasioned by a particular syntactic configuration, i.e., a particular set of dominance and precedence relations, the use is syntactic. In contrast, when the use of a case is not structural, but the result of a meaning relationship that the noun has to some other word, then the use is semantic." Using this criterion, first I will show how syntactic configurations determine or affect the case marking of a syntactic category in

the ergative and absolute cases.

Observe the following sentences:

(58) Rāmā la:-Ø ha-la

Ram-erg water-abs brought-p/3

'Ram brought water.'

(59) Rām-Ø pyāha wa-na

Ram-abs out go-p/3

'Ram went out.'

In (58), the subject NP is marked in the ergative case, and in (59), in the absolute case. Semantically viewed, Ram is the instigator of action in both sentences, i.e., the relevant thematic relation (Gruber 1965, 1976) here is [AGENT]. But the case marker on Ram in (58) is [ERG], because the verb is transitive. In (59), the verb is intransitive, and therefore the subject is in the [ABS] case. The transitive/intransitive distinction shows up as a syntactic distinction. Verbs that are [+CMP] in RG are transitive; those that are [-CMP] are intransitive. Moreover, verbs that are [+CMP] have subjects marked [ERG]; verbs that are [-CMP] have subjects marked [ABS]. This restriction can be handled as a filter of agreement:

- (60) (a) [V''' [N''' ...[ERG]] ...V [+CMP] ...]
 (b) [V''' [N''' ...[ABS]] ...V [-CMP] ...]

The distinction between [ERG] and [ABS] is therefore completely syntactic, since it depends on the syntactic specification [+/-CMP].

Observe that the [+/- CMP] distinction is indeed syntactic even in English. Words like "break" and "move" are both [+CMP] and [-CMP]. We have He broke the jars alongside of The jars broke. On the other hand, "kill" is [+CMP], while "die" is [- CMP]. There is no reason, in principle, why a verb like "die" or "go," for example, couldn't be used transitively; in fact, children often say things like "I goed the truck" for "I made the truck go" (see Brown 1973). In short, one must learn which verbs in English are syntactically [+ CMP] and which are [- CMP].

The following conjoined sentences (61a) and (61b) ignore the morphological specifications of the conjoined items, i.e., the case marking ([ERG] and [ABS]), and rather examine the functional relation SUBJECT (Chomsky, 1965), which in RG is identified as the adjunct immediately dominated by V''' :

- (61) (a) Rāmā̄ la:-Ø ha-la wa pyāha
 Ram-erg water-abs brought-p/3 and out
 wan-a
 go-p/3

'Ram brought the water and went out.'

- (b) Rām-Ø pyāha wa-na wa la:-Ø
 Ram-Ø out go-p/3 and water-abs
 ha-la
 brought-p/3

'Ram went out and brought the water.'

Ram is the subject of both la: ha-la, and pyāha wa-na. But note that in the conjunct sentences, the verbs wa-na in (61a), and ha-la in (61b) have syntactic specifications [-CMP] and [+CMP] respectively, which differ from the first parts of the sentences. In (61a), the NP Rāmā̄ occurs with the ergative case marker even though the main verb in the conjunct is the [-CMP] verb wa-na which requires an absolute case marker on the subject. In (61b), the NP Ram is in the absolute case despite the [+CMP] verb ha-la in the conjunct which requires an ergative case marker on the subject NP. The conjoined sentences in (61), therefore, are grammatical because both subjects ([ERG] and [ABS]) reside in the same position on the V''' level. Notice that the morphological differences ([ERG] and [ABS]))

occur even when the sentences are in their full forms as follows:

- (62) (a) Rāmā̄ la:-Ø ha-la wa wa-Ø
 Ram-erg water-abs brought-p/3 and he-abs
 pyaha wa-na
 out go-p/3

'Ram brought the water and he went out.'

- (b) Ram-Ø pyāha wa-na wa wa
 Ram-abs out go-p/3 and wa-erg
 la:-Ø ha-la
 water-abs brought-p/3

'Ram went out and he brought the water.'

Given this, we can say that in Newari, the subject is always a prehead X''' resident. If the verb is [+CMP], then the subject is marked [ERG]; if it is [-CMP], then it is marked [ABS]. This is a syntactic specification of case. Observe that in English we say that the subject is nominative if the head is a verb ("He criticized the book."), but possessive if the head is a noun ("his criticism of the book..."). In fact, one of the principal motivations of X' syntax (Chomsky 1970; Jackendoff 1977) was to find a means of expressing such cross-categorial generalizations. Given the X' framework, a deeper analysis of syntactic function (subject, object, etc.) is possible despite differing

overt realizations (nominative, possessive, ergative, etc.).

Corroboration of this analysis occurs in sentences where the subject is topicalized; either the ergative phrase in (58) or the absolute phrase in (59) could occur in S-final position (cf. (32a) diagrammed as (34)). In short, topicalization is not sensitive to the case of the subject phrase. Furthermore, when both the ergative and the absolute phrases occur in S-final position, the main verb agrees in person with the subject (dominated by V'') regardless of its case:

- (63) (a) $\tilde{\text{pyahā}}$ wa-nā ji-∅
out go-p/l I-abs
'The one who went out was I.'
- (b) la:-∅ ha-la chā
water-abs bring-p/2 you-erg
'The one who brought the water was you.'

There is a minor complication in this analysis when the subject is inanimate. The determination of subject is obscured in Newari by the fact that the verb is not inflected for number and, furthermore, shows distinctions between first and non-first persons only (see section 2.4.1.4). This means that, in the Newari version of a sentence like "the door opened," there is no morphological indication of which of the following

two analyses is correct: (i) "door" is the subject and the verb is personal, or (ii) "door" is not subject and the verb is impersonal. Since "door" is absolute, either interpretation is possible: "the door opened" versus "there was an opening with respect to the door."

Adding another argument to the sentence helps to clear up matters. For example, in "I opened the door," three facts interact: (i) "door" is absolute, (ii) "I" is ergative and can be verified as subject by its postposition in topicalized variants, and (iii) the verb agrees with "I" in person. In, "the wind opened the door," the situation is changed: (i) "door" remains absolute, (ii) "wind" is instrumental and cannot be verified as subject because it does not occur in S-final position in topicalized variants, and (iii) there is no way to verify any agreement in the verb because "wind" is third person singular. Since "wind" does not occur in S-final topicalized position like the animate subject "I," it appears that we must deduce that sentences like "the wind opened the door" and "the door opened" have no subjects. In short, the V''' prehead position is empty. Indeed, the only time this position can be filled is when the sentence contains an agent. The ergative and absolute cases do not show up as non-agentive subjects in translations of sentences like "Ram is here" or "I

need soap." Consider the following:

- (64) (a) Rām-Ø thana du
 Ram-abs here is
 'Ram is here.'
- (b) Ji-ta sābū-Ø mā-la
 I-dat soap-abs need
 'I need soap.'
- (c) Ji-ta kāuli tarkāri-Ø ya
 I-dat cauliflower curry-abs like
 'I like cauliflower curry.'

The problem in these examples is again to determine whether the animate NPs can be regarded as occupying subject positions in sentence structure on the V''' level, or whether they are examples of subjectless sentences. I have not indicated any person in the verb transcription, because all these verbs are invariable for both person and number. There is a controversy in South Asian languages with similar structures on the notion of what really constitutes subject, and the problem remains unresolved (see Verma 1976 for discussion). One class of sentences, which has not been discussed in the literature, appears to me to conclusively settle the issue, at least for the examples like (64) involving the dative case. These are as follows:

- (65) (a) Ji-ta cha-Ø mā-la
 I-dat you-abs need
 'I need you.' (Literally: 'There is need
 to me of you.')

- (b) chā-ta ji-Ø mā-la
 you-dat me-abs need
 'You need me.'

- (66) (a) Ji-ta cha-Ø ya
 I-dat you-abs like
 'I like you.' (Literally: 'There is liking
 by me of you.')
- (b) chā-ta ji-Ø ya⁹
 you-dat me-abs like
 'You like me.'

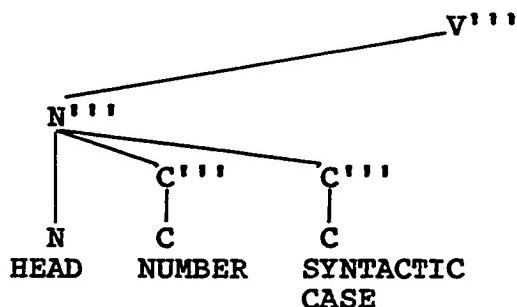
Observe that neither the dative nor the absolute phrases in (65) and (66) can be the subject: both are personal, yet the verb is impersonal. As we have seen, Newari verbs must agree in person with the subject, regardless of the subject's case (cf. (63)). Therefore, these examples have no subjects and, accordingly, the verbs are invariant and impersonal.

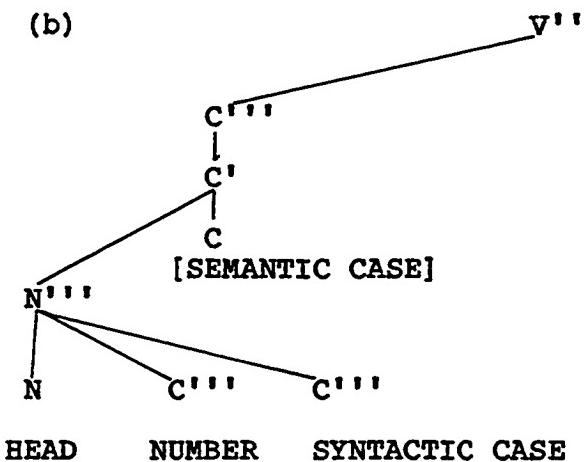
The conclusion to be drawn here is that the only noun phrases that can serve as true subjects in Newari are agents.¹⁰ In basic word order, these occur in initial sentential position, i.e., as prehead constituents on

the V''' level. In topicalized positions, they are S-final and bound to a V''' Level prehead empty node (cf.(34)).

To express these facts we make use of the RG distinction between semantic case and syntactic case noted above. This distinction is captured diagrammatically in the structures below. In (67a), the subject noun phrase in the ergative or the absolute case, both of which are syntactic cases, comes off V''' as a prehead N''' node with N as the head of the construction. The syntactic case marker is represented as a posthead characterizer. In (67b), when the relevant case is a semantic one, as in an IO noun phrase in the dative case, the semantic case forms the head of the construction, and comes off V'' as a prehead C''' node. The IO noun phrase comes off C' as a prehead N''' node with the syntactic case marker as a posthead characterizer.

(67) (a)



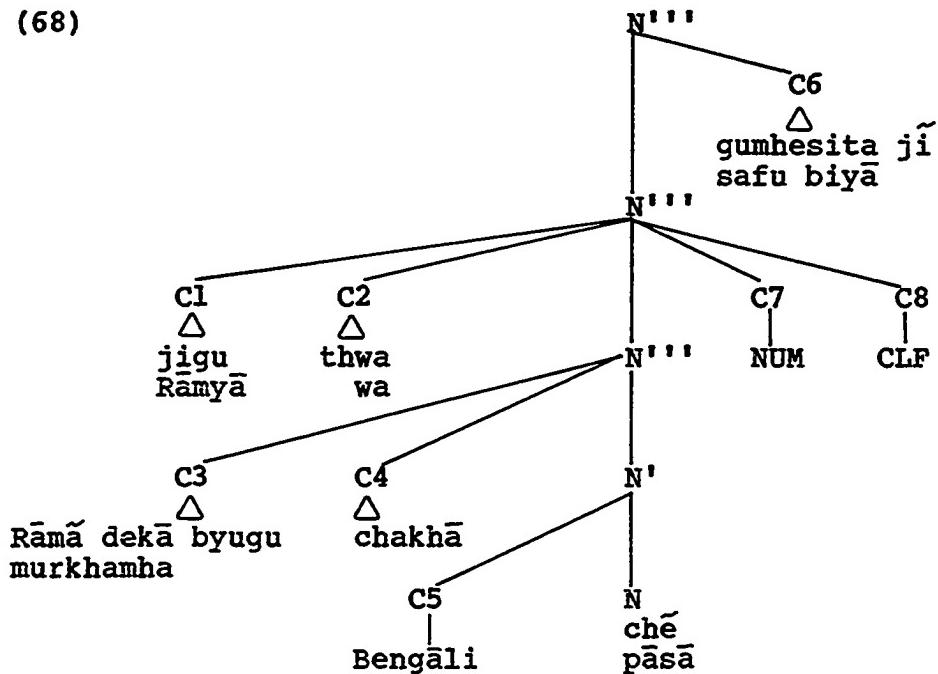


The diagrammatic representations in (67) are typical of the ones we will adopt for the analysis of cases in Newari. They make an important distinction between semantic and syntactic uses of cases, which, as we see in relation to subject, is crucial in Newari. However, in this study, the case system is not extensively treated because it has no effect on negation, the focus of this investigation.

3.5: Internal Structure of Noun Phrases

Adopting the basic phrase structure schema of RG given in (27) and the terminology used in this model such as "prehead" and "posthead" positions, the internal structure of NPs in Newari can be diagrammed as follows:

(68)



The diagram above shows the internal structures of the following noun phrases:

- (69) Ji-gu thwa Rāmā dekābyu-gu cha-khā

I-gen this Ram-erg build-clf/rel one-clf
ché-Ø

house-abs

'This one house of mine which Ram built (for me)'

- (70) Rām-yā wa murkha-mha Bengāli pāsā-Ø

Ram-gen that stupid-clf Bengāli friend-abs

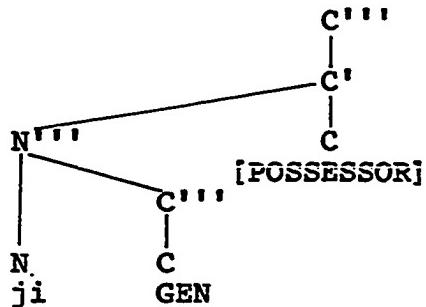
gu-mhe-si-ta ji safu-Ø bi-yā

who-clf-dat I-erg book-abs give-p/l

'That stupid Bengali friend of Ram's to whom I gave the book'

Position C1 in (68) contains possessive nominals such as ji-qu and Rām-ya whose internal structure is as follows:

(71)



C2 is the position of demonstratives such as thwa, wa 'this', 'that' respectively, or thu-mha, thu-qu, u-qu when combined with classifiers. A few degree words including intensifiers, such as sāp, ati, 'very'; taskā 'extremely'; etc. are also assigned to this position.

Position C3 is the position of descriptive adjectives, restrictive relative clauses, comparatives, and nominal complements. Here we must remember that Newari displays a characteristic typical of many SOV languages, i.e., all embedded clauses within an NP premodify the head noun with the exception of the appositive relative clauses.

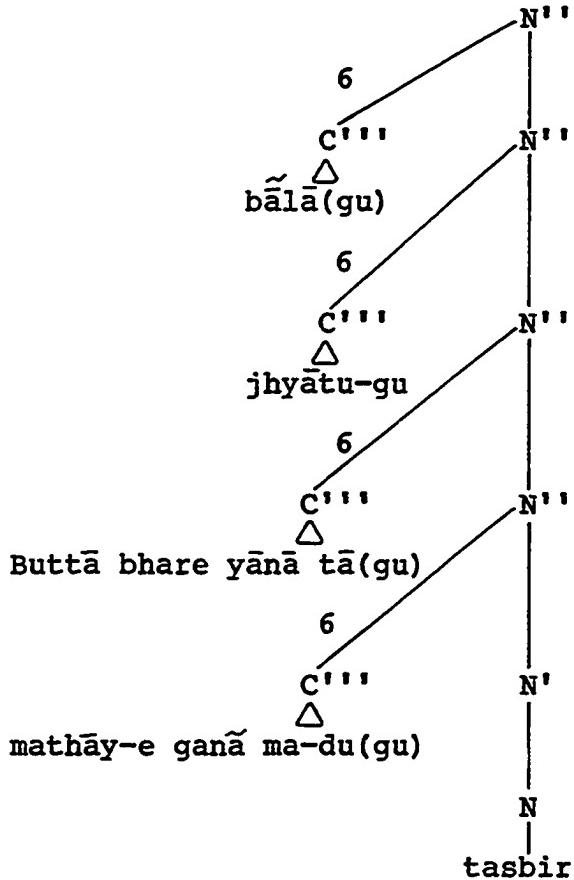
The recursive rule (27) introduced in RG adequately handles the recursion within the embedded

clauses. Therefore, position C3 can dominate a sequence of adjectives, and relative clause constructions, such as the following:

- (72) $\tilde{B}\bar{a}\bar{l}\bar{a}$ -gu, $jhy\bar{a}tu$ -gu, $but\bar{t}\bar{a}$ bhare $y\bar{a}\bar{n}\bar{a}$ ta-gu,
 pretty-clf, heavy-clf, embroidered-clf,
 $meth\bar{a}y$ -e $gan\tilde{a}$ ma-du-gu tasbir-Ø
 other place nowhere neg-available picture
 'pretty, heavy, embroidered, picture(s) that
 are not available anywhere else'

The RG structure is as follows:

(73)



In Newari, the order of descriptive adjectives and restrictive relative clauses is syntactically free. Nominal complements and comparatives, however, are the more tightly bound clauses appearing closest to the head noun. In a sequence of adjectives, relative clauses, complements and comparatives, for example, the latter two types of clauses occupy the final positions in the sequence. Observe examples (74) and (75):

- (74) Mis-te-gu nhu-gu, hālsal tini du-gu,
 woman-pl-gen new-clf recently only have-clf
 dhebā kame yāy-gu hak-Ø
 money earn do-inf-rel right-abs
 'Women's new, recently acquired right
 to earn money'
- (75) Mis-te-gu nhu-gu, yakwo kosish yānā
 woman-pl-gen new-clf many try do
 deku-gu nhāpā sibe bālā-gu
 build-clf-rel before than good-clf=rel
 abasthā-Ø
 condition-abs
 'Women's new, improved (better than before)
 condition which was secured after many attempts'
 The nominal complement in (74), and the
 comparative clause in (75) - dhebā kame yāygu and

nhāpā sibe balāgu abasthā- respectively occur closest to the head nouns hak and abastha.

Position C4 of (68) contains cardinal and ordinal numerals, and quantifiers. In Newari, numerals and quantifiers share characteristics with adjectives such as classifier suffixes and premodification of head nouns. Therefore, I have considered this category as [+Adjunct -Nominal]. For a discussion of numerals and quantifiers in an RG analysis of English, see Binkert, Chapter Two.

Position C5 is the residence of complex nominals such as āngreji bhāv 'English language', mīsā machā 'girl child'. The structure for such nominal constructions is straightforward, because in Newari they do not include a sequence of more than three words at the most, and cannot embed other complex nominals within them. All other premodifying attributive, descriptive items appear on C3.

C6 includes appositive relative clauses which are unique in the posthead position they occupy. The structure for English appositive relatives determined in Binkert (Chapter Three) is appropriate for Newari, so I adopt it here without elaboration.

Position C7 is occupied by number which I have categorized as [+Adjunct, -Nominal], because in Newari,

not only nouns but adjectives also are marked for number. Only animate nouns, pronouns, and adjectives can take plural suffixes. -pi̤ and -ta are the most common plural markers. The suffix -pi̤ is attached to pronouns, attributive adjectives, and nouns denoting kinship relations, and respectful forms used while referring to important personages. -ta is added to all other animate nouns. Since inanimate nouns do not take plural markers, very often words like dakwo, fukka, samasta 'all' are added to these nouns to express plurality. When adjectives occur with plural nouns, they take the plural marker -pi̤ generally, e.g., bhi-pi̤ mis-ta 'good women', hārā-pi̤ mas-ta 'naughty children'.

Position C8 is the home of classifiers. Adjectives, nouns and numerals carry classifier suffixes: -mha to qualify an animate noun, and -gu to qualify an inanimate noun generally. However, when a numeral qualifies an inanimate noun, a wide variety of morphological markers are suffixed to qualifying numerals based on the nature, size and shape of the objects qualified.

To summarize, an NP structure has the following positions: on X''' level, we have demonstratives and degree words as the first prehead characterizer; and the

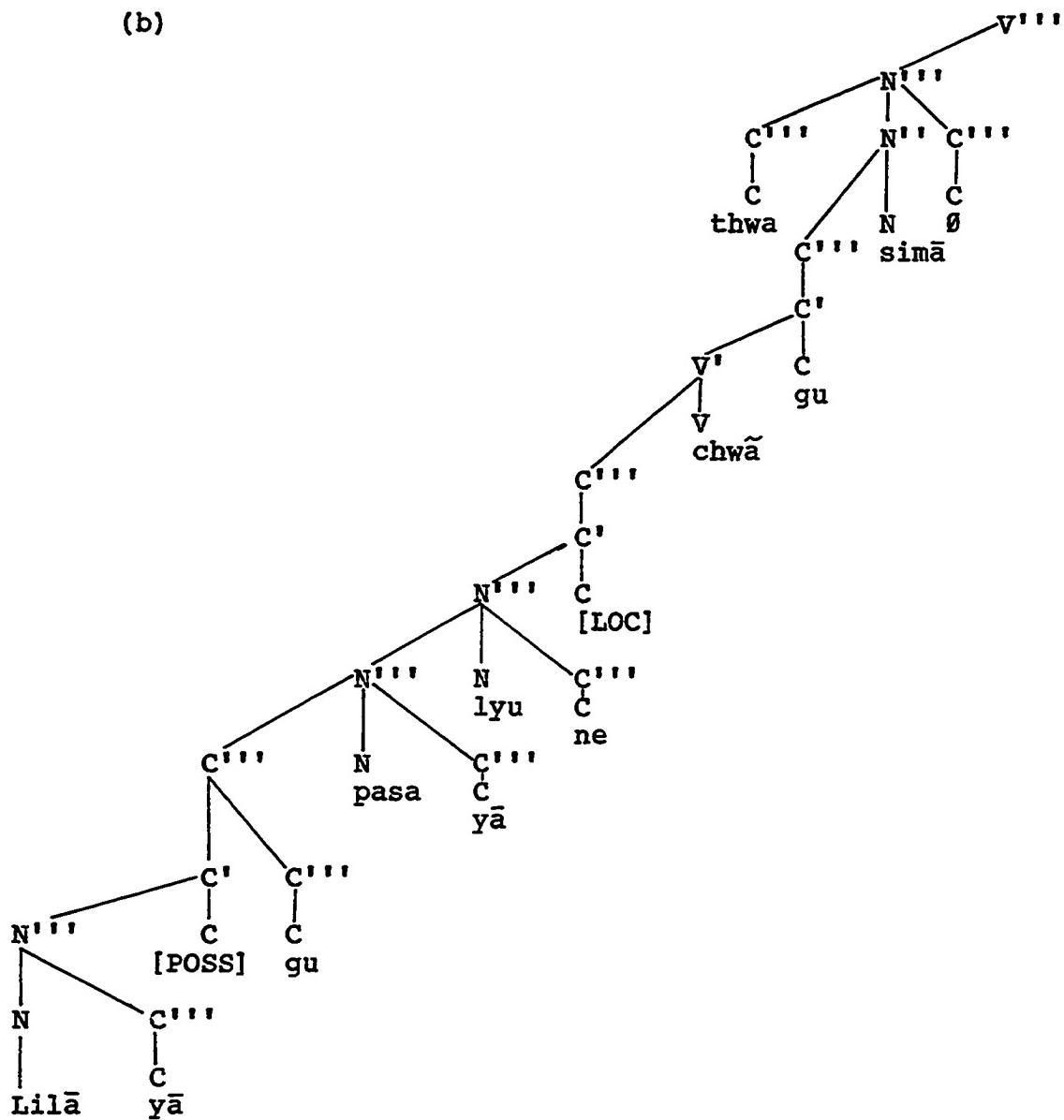
possessives as the second prehead characterizer. Number and classifier appear as the first and second posthead characterizers respectively on this level, as do appositives. On X'' level, numerals and quantifiers occur in the first prehead position, and adjectives, restrictive relative clauses, comparatives, and nominal complements in the second prehead position as characterizers. Finally, on X' level, complex nominals occur in the first prehead position as C5. This distribution with regard to levels, e.g., demonstratives on N''' , adjectives on N'' , etc., is remarkably similar to English.

In this description of the NP, I have merely indicated the different positions of the constructions at different levels. Many of these structures will be further discussed as we proceed, depending on their relevance to our discussion of the syntax and semantics of negation. We conclude this section with one further example in Newari of a complex noun phrase with the relative clause fully specified. Notice that in this sentence, the function of gu as a relativizer/subordinator is distinct from its function as a classifier. As a subordinator, it is the head of its construction, but as a classifier, it is a posthead characterizer. The RG model makes it possible to specify

this distinction in functions of *gu* in terms of the positions this formative occupies in the structure of the sentence. This structure looks promising, but it is beyond the scope of this study to discuss it further.

- (77) (a) thwa Lilā-yā-gu pasa-yā lyune
this Lila-gen-clf shop-gen behind
chwā-gu sima-Ø
stay-sub/rel tree-abs
'This tree which stands behind Lila's
shop'

(b)



3.6: Syntactic Feature Matrix of Newari

Based on our discussion so far, I present a syntactic feature matrix of the major syntactic categories of Newari, namely, verb, noun, and characterizer, in terms of basic syntactic distinctive features. This matrix allows for reference to each of the important groupings of categories found to be necessary for this language: nouns and characterizers, [+Adjunct]; verbs and nouns [+Neighbor]; and verbs and characterizers, [-Nominal] (the formal definitions of these features are found in Table One). It is important to point out here that the particular inventory of features for an individual language must be determined in terms of that language, that is, there is no a priori reason for assuming that a syntactic feature like [+PREHEAD] will be operative in Newari, any more than there is reason, a priori, to assume that the feature [+NASAL] is operative in the phonology. In short, while the theory claims that the inventory of substantive syntactic features includes the features [+/- PREHEAD], the particular distribution of this feature depends on the particular language involved. It is conceivable that a language might not even contain the feature. In Sanskrit, there are virtually no prepositional phrases;

however, both English and Newari contain them. But, in English prepositional phrases are [-PREHEAD] (cf. *"the with a beard man"), whereas in Newari they are [+PREHEAD]. The same divergences are noted in regard to the other features, e.g., [+/- X''' LEVEL], [+/- COMPLEMENT], etc. To conclude, the syntactic feature matrix presented here provides a working hypothesis of the syntactic distinctive features for Newari. A comparison of this matrix with the one for English presented in Binkert (Chapter Seven) shows several significant differences reflecting the differences between the two languages (See Appendix A).

	AJT	NML	NEI	ENN	ENV	ENC	X3L	X2L	X1L	PRH	PSH	CMP
VER	-	-	+	+	+	+	+	+	+	-	+	+/-
MOL	-	-	-	+	-	-	+	-	-	-	+	-
NOU	+	+	+	+	+	+	+	+	+	+	+	+/-
WHQ	+	+	+	+	-	+	+	-	-	+	-	-
CLF	+	-	+	-	+	+	+	-	-	-	+	-
CPL	+	-	-	+	-	+	-	-	-	+	-	-
DEM	+	-	-	+	-	+	-	-	-	+	-	-
DGR	+	-	-	+	-	-	-	+	-	+	+	-
TNS	+	-	-	-	+	-	+	-	-	-	+	-
AVB	+	-	-	-	+	+	-	+	-	+	-	-
ADJ	+	-	-	+	+	-	-	+	-	+	-	-
PPN	+	-	-	+	+	+	+	-	-	+	+	+/-
SCJ	+	-	-	-	+	+	+	+	+	+	+	+
NUM/+	-	-	-	+	-	+	-	+	-	+	+	-
QNT												

TABLE ONE

Syntactic Feature Matrix of Newari

Abbreviations:

VER: VERB

DGR: DEGREE

MOL: MODAL

TNS: TENSE MARKER

NOU: NOUN

ADV: ADVERB

WHQ: INTERROGATIVE PRONOUN

ADJ: ADJECTIVE

CLF: CLASSIFIER

PPN: POSTPOSITION

CPL: COMPLEMENTIZER

SCJ: SUBORDINATING

DEM: DEMONSTRATIVE

CONJUNCTION

NUM/ NUMERAL

QNT: QUANTIFIER

The feature values, plus and minus, refer to the expected cases typically representative of that specific category. Exceptions occur, but they have not been taken into account here.

AJT: ADJUNCT; occur in S-initial position freely; can be

embedded into the X''' level of any category;
always have an X''' level

NML: NOMINAL; always occur in prehead position; always
have a case

NEI: NEIGHBOR; always have an X''' level characterizer
in posthead position. Verbs and nouns can both
have this feature, because V has tense as a
posthead X''' level characterizer, and N has
number as X''' level characterizer. Characterizers
have no X''' level posthead characterizers.

ENN: ENVIRONMENT OF N; can occur in N''' level
immediately
dominated by some N level of the N'''

ENV: ENVIRONMENT OF V; can occur in V''' level
immediately
dominated by some V level of the V'''

ENC: ENVIRONMENT OF C; can occur in C''' level
immediately
by some C level of the C'''

X3L: X 3 LEVEL; can occur as daughter of some X''' level

X2L: X 2 LEVEL; can occur as daughter of some X'' level

XLL: X 1 LEVEL; can occur as daughter of some X' level

PRH: PREHEAD; can occur in prehead position

PSH: POSTHEAD; can occur in posthead position

CMP: COMPLEMENT; can govern complement on the X' level

Notes on Chapter Three

¹The suffix -gu in Newari performs several functions: (a) it represents the infinitive form of the verb, e.g., yāy-qu 'to do', dyane-qu 'to sleep', etc.; (b) it is also a classifier suffixed to adjectives, and numerals denoting [-animate] NPs, as in bālā-qu safu 'good book', cha-qu safu 'one book'; (c) it acts as a subordinator in sentences such as (2) here; and (d) as a relativizer in relative constructions, for instance, in ji mhiga chan-ta biya-qu safu 'the book which I gave you yesterday'. Three of its functions (a), (b) and (c) may be coalesced into one primary function by assuming that -gu is merely a classifier, and that since there are no subordinating or relativizing forms in Newari, -gu merely denotes an [-animate] NP. If the NP is [+animate], -mha functions as the classifier as in bālā-mha misā 'pretty woman', ji-mha misā 'my woman'; -mha also appears to perform subordinating and relativizing functions in these contexts (see example (7b) in the text). These suffixes need to be studied further.

²In Japanese, for example, the main verb of the embedded clause is "verb raised," and attached to the left of the matrix verb, as in:

Koori ga toke-dasu
ice melt-begin

'Ice begins to melt.' (See Kuno 1976: 21)

Examples from Nepali and Hindi (Indo-Aryan languages) also show similar occurrences:

Mai-ne Ram-ko khat-Ø padte-hue dekha
I-erg Ram-dat letter-abs read-prt see-past
'I saw Ram read (the) letter.'

(Hindi)

Mai-le Ram-lai chithi-Ø padi-raheko dekhe
I-erg Ram-dat letter-abs read-prog see-past
'I saw Ram read (the) letter.'

(Nepali)

³See note 1 above.

⁴machā and Rām in these examples are not marked for absolute or ergative cases, because the main verbs of the matrix sentences (not shown here) will determine the case-endings on these NPs. safu in (7a),

however, is always marked absolute, because a [-animate] noun can never take the ergative case suffix.

⁵ kā expresses interjection, and implies that the hearer must know what the speaker is referring to.

⁶ Nominals have been traditionally divided into two classes in grammars of Newari (See Section 2.4.1). Animate nouns are marked for gender, number, and case while inanimate nouns are specifically indifferent to number and natural gender, but are marked for certain case distinctions, such as instrumental as in chakuti 'with a knife', elative as in pahāda 'from the mountians', locative pahād-e 'in the mountains', and absolute Ø. Because of their inherent characteristic feature [-animate], these nouns can not be marked for ergative, dative, comitative and genitive cases.

⁷ The Newari number system comprises two numbers: the singular and the plural. See section 2.4.1.2 for further discussion.

⁸ An important gender distinction in Newari is between animate beings and inanimate objects. -mha and -gu are the two basic morphological markers used as suffixes to express this distinction. -mha is suffixed to genitives, adjectives and numerals qualifying animate nouns and verbal nominals; whereas -gu is suffixed to genitives, numerals, and adjectives qualifying inanimate objects.

⁹ There is a whole set of feeling/sensation-expressing phrases in Newari, which require an experiencer in the dative case. Observe the following sentences:

- (i) Ji-ta ne pityāta
'To me eat-feels/ I feel hunger'
- (ii) Ji-ta la: tone pyāchala
'To me water drink feels/ I feel thirsty.'
- (iii) Chi-ta mhā fu lā?
'To you body can Q/ Are you well?/ How are you?'

There is also a small number of verbs such as ya: 'like', māsti wai: 'feel like (doing something)', and mā 'need', which require a subject experiencer in the dative case too, for example, ji-ta nhile māsti wala 'I feel like laughing'; ji-ta safu-Ø māla 'I need book.'

An interesting point in this case is that the

verb phrases in the sentences above such as ne pityāta and mhā fu la operate as inseparable units. If topicalized, the entire verb phrases must be fronted. As a result, only two alternatives are open to us: (a) ji-ta and chi-ta are experiencer subjects in the dative case, or (b) the sentences such as the above are subjectless sentences (impersonal). I argue for the (b) solution.

¹⁰ 'The notion of subject in South Asian languages ', edited by Manindra K. Verma (1976), offers an extensive study on this topic.

CHAPTER FOUR

STUDIES ON NEGATION: AN OVERVIEW

4.0: Introduction

Negation was not a topic of insightful discussions in linguistics prior to Klima's classic article "Negation in English" (1964).¹ In classical generative grammar, it was assumed that a negative sentence can be derived from a corresponding positive sentence by the insertion of a negative particle in the appropriate slot. In Syntactic Structures (Chomsky 1957), negation is treated as an optional transformation which inserts a negative element into a positive clause. Lees (1960) was the first to propose generating NEG (negation) in the underlying structure, and Klima (1964) posited NEG as an underlying morpheme which triggered the obligatory application of NEG-transformational rules, thus supporting the Katz-Postal (1964) hypothesis of meaning preserving transformations.

Subsequent research on different aspects of negation brings out the total inadequacy of such an oversimplified process. Extensive discussions on the scope of negation, multiple negation, negative polarity items, such as any, and, ever etc., have indicated that the overt simple syntax of negation involves an enormously complex semantic representation. Furthermore, since the early work on negation, the usual conceptions of syntax in terms of transformational derivations, and of semantic interpretation in terms of underlying structures, have been modified by a more surface-oriented approach. The more recent studies on presuppositional and pragmatic analysis of negation further indicate that the semantics of negation involve much more than asserting the falsehood of a proposition.

This review discusses several significant analyses representing the three basic approaches to negation: syntactic, semantic and interpretive. Section One deals with the fundamental features of Klima's treatment of sentential and constituent negation, focusing on the four controversial topics of scope, negative-raising, multiple negation and negative polarity items such as any, and ever. In Section Two, the semantically oriented studies of Lakoff (1969,

1970), Carden (1967, 1968, 1970) and McCawley (1970, 1976), are considered. Jackendoff's interpretive theory is examined in section three. Section four is concerned briefly with Lasnik's work (1972) which attempts to develop a unified theory of negation by combining and developing the insights presented by Klima in his syntactic analysis and by Lakoff and others in their semantically based work. Finally, the current pragmatic approach, which is not dealt with specifically in this study, is briefly mentioned.

The general organization of each section is as follows: first, the fundamental features of each analysis are outlined; second, the shortcomings in each position are indicated, followed by brief references to alternative proposals made by other linguists to account for the unexplained data.

4.1: Syntactic Approach to Negation

This approach is best represented in Klima for he presents the first and the most comprehensive syntactic analysis of all kinds of negation. He concentrates on a purely formal grammatical analysis and takes no account of semantic equivalences. Other syntactic studies concentrate on specific issues only, such as syntactic motivation behind the negative-raising

rule, the some/any rule, and the concept of the structural relation "in construction with" as compared to the notions of "command" or "in dominant construction with", etc.² None of these venture to put forward a coherent theory of negation comparable to Klima's. In this discussion, therefore, their arguments are presented only at relevant points in relation to Klima's views.

4.1.1: Klima On Sentential Negation

Klima's central thesis is that sentential negation is due to a single NEG morpheme per simplex sentence, occurring sentence-initially in the deep structure, and that a number of transformational rules account for the surface structure configurations of negation in diverse types of sentences. Unless otherwise stated, all references in this section are to Klima (1964).

First, Klima examines a wide range of sentences containing a variety of distinct negative words such as not, nothing, never etc., and analyzes them as containing a constituent NEG with a single underlying position in the sentence.

Second, he proposes certain criteria for distinguishing a class of negative sentences. He defines

the following structures as instances of sentential NEG, because they allow the occurrence of the Either- clause (1) the NEG appositive tag (2) the Question tag without not (3) and Neither tag (4). The examples below are Klima's, and the numbers in brackets correspond to Klima's numbering.

- (1) Publishers will usually reject suggestions and writers will not accept them either.[43]
- (2) The writer will not accept suggestions, not even reasonable ones.[48a]
- (3) Writers will never accept suggestions, will they? [53a]
- (4) Writers will seldom accept suggestions, and neither will publishers.[60]

In the sentences exemplified as negatives by the above criteria, he attempts to explicate the syntactic relation between not and other negative words such as none, no, never, etc., by postulating a deep structure morpheme NEG as an optional constituent adjoined to the main sentence as a daughter.

Third, he proposes that the sentential NEG performs three important functions. The first function of NEG is to condition certain transformational changes within the sentence. For example, it triggers some/any suppletion by the Indefinite-incorporation rule, which

Klima represents as the addition of a feature "INDEF(inite)" into a constituent marked "INDET(erminate)", in the presence of an Affective, (NEG or WH of Question). To put it simply, a number of negative polarity items such as any, ever, and yet are derived transformationally from corresponding affirmative items, some, sometime, and already respectively, by the application of the INDEF rule, whenever an Affective element is present in the sentence (1964:276-284). NEG also triggers another transformation: the Auxiliary-Inversion (1964:297-300). Examples illustrating these functions will be given in the following discussions. The second function is to affect deep structure constraints in certain constituents whose occurrence is favored by NEG such as until-phrases, a number of idiomatic expressions and the modal need (1964:287-289). The third function of NEG is to transformationally incorporate itself to other words like ever, anything, one, resulting in nothing, one, never, by the rule of NEG incorporation (964:274-276).

Fourth, Klima presents a system of transformations in the form of a sequence of rules to account for the surface structure configurations of NEG in a wide variety of sentences. Some of his most

important rules are INDEF-placement, Adverb preposing, Passive, NEG incorporation and Do-Support (1964:318-321). It is important to note here that in Chomsky (1957), NEG is treated as an optional transformation which inserts a NEG element into a positive clause, thereby changing the meaning of the sentence. But Klima's postulation of the presence of NEG in the deep structure supports Katz and Postal's (1964) hypothesis of meaning preserving transformations proposed after Klima's study.

4.1.2: Scope of NEG and Constituent NEG

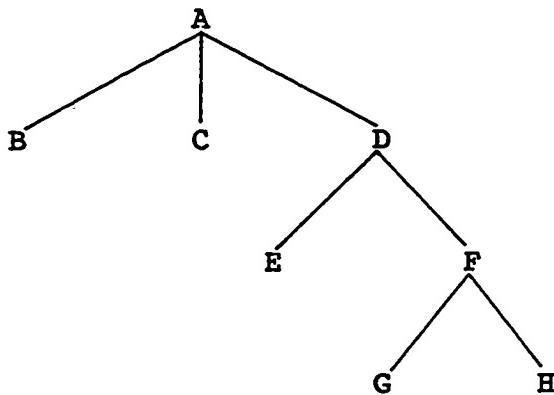
Klima describes the scope of NEG in terms of the concept "in construction with". This notion is explicated as follows:

"A constituent is "in construction with" another constituent if the former is dominated by (that is, occurs somewhere lower down the branch of) the first branching node that dominates the latter." (Klima 1964:297)

In diagram (5) below, the constituent F is "in construction with" E, because F is dominated by the first branching node D which also dominates E. The constituents B,C,D are "mutually in construction" for all three are dominated by A. But B is not "in

construction with" E since B is not dominated by D.

(5)



Sentential NEG occurs when NEG, the Subject Nominal and the Predicate are "in construction with" one another, and are directly dominated by S: (Wh) NEG-NOM-PRED, that is, the scope of NEG extends over the constituents it is "in construction with". In some cases, the scope also extends beyond the clause in which NEG appears into the subordinate clause. For example, in (6),

- (6) (a) He didn't realize that anything was wrong.
- (b) *He did realize that anything was wrong.
- (c) He realized that something was wrong.

The Indefinite in the subordinate clause is triggered by NEG in the matrix clause which shows that the scope of NEG extends over the subordinate clause with respect to the occurrence of Indefinites in that clause.

Klima differentiates between Sentential and

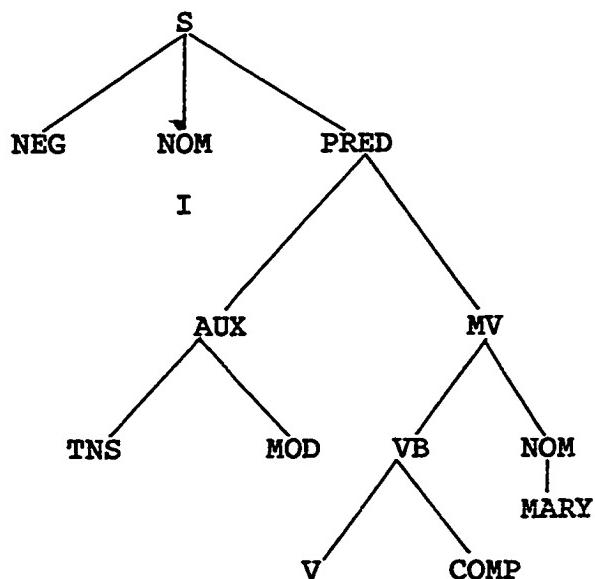
Constituent NEG. He notes various occurrences of not without sentential NEG as defined in section 4.1.1, for instance in infinitive and gerund phrases as well as in subordinate clauses of the type:

- (7) He says that there will be no party.
- (8) Not long ago she was an emotional wreck.

In (7) and (8), only certain constituents represented by party and long ago, are negated, not the whole sentence. The scope of NEG is restricted to the constituents it is "in construction with" and therefore results in sentences which are examples of what Klima calls Constituent NEG.

To illustrate the difference between Sentential and Constituent Neg in terms of scope of NEG, we take an interesting example of a structurally ambiguous sentence, "I can persuade Mary to do nothing". In one reading of this sentence, equivalent to "I can't persuade Mary to do anything", the scope of NEG extends over the whole sentence. The NEG, Nominal and the Predicate are "mutually in construction", dominated by S, as shown in (9a), and (9b). These diagrams follow Klima's system of dividing a sentence into the two major constituents of NOM and PRED:

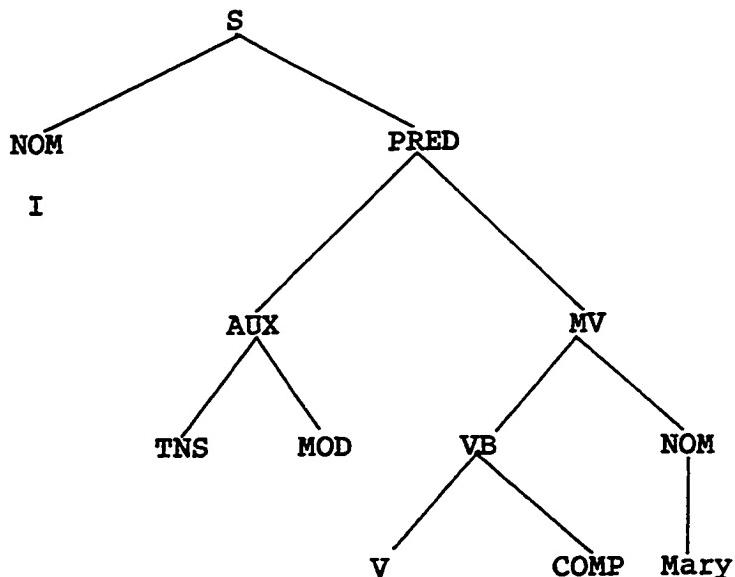
(9)



persuade to do something

In the second reading of the same sentence equivalent to "I can persuade Mary not to do anything," NEG is "in construction with" only the constituent represented by the complement. See diagram (10).

(10)



Persuade NEG to do something

This is an instance of constituent NEG.

Thus Klima's characterization of scope is totally syntactic. He claims that "the scope of negation varies according to the origin of the negative element in the sentence (over the whole, over subordinate complementary structures alone, or only over the word containing the negative element) . . . When the negative element originates in the other constituents (as for example in the extreme case of doubt), the scope of

negation is restricted to structures subordinate to those constituents" (Klima 1964:316).

4.1.3 Negative Absorption Rule

Klima proposes a special analysis in order to account for sentences like the following:

- (11) They don't think that children can help laughing at that.
- (12) It is unlikely that the players will relax until after the game.

The embedded sentences in (11) and (12) independently are not acceptable:

- (13) *Children can help laughing at that.
- (14) *The players will relax until after the game.

Their corresponding source sentences must contain negatives to be totally acceptable in the contexts in which they are uttered. But as subordinate sentences as in (11) and (12), they can appear without negatives.

Klima interprets this phenomenon as resulting from the absorption of the negative from the subordinate clauses into the maxim sentences in the form of n't in (11) and un in (12), on condition that the main clause does not already contain NEG. He calls this grammatical process "negative absorption".

On further examination of sentences containing

inherent negatives such as doubt, and forbid, he concludes the following: negative absorption is to be understood not as the absorption or the relocation of the negative from the embedded sentences, when the principal sentences contain a certain type of complement governors like think, likely, etc., and certain favorable negative constituents like doubt, forbid, and too. (1964:292-295)

4.1.4: Negative Polarity Items

Lexical polarity is discussed for the first time in KLima, within the generative framework. KLima observes that there are a number of polarity sensitive items in English: negative polarity items such as any, ever, and yet which occur in negative constructions and affirmative polarity items such as some, sometime, and already, which occur in positive sentences. See examples (15a), and (15b), and the corresponding but ungrammatical sentences (16a), and (16b):

- (15a) He hasn't reurned home yet.
- (15b) *He has returned home yet.
- (16a) He has returned home already.
- (16b) *He hasn't returned home already.
- (15b) and (16b) appear to be positive counterparts of

(15a) and (16a) respectively, but they are ill-formed due to the occurrence of a negative polarity item in an affirmative sentence (15b) and a positive polarity item in a negative sentence in (16b).

However, Klima points out that negative polarity items occur frequently in subordinate clauses which independently are not acceptable. Example (17a) below is a perfectly well-formed sentence, but the subordinate clause contained therein, (17b) is ungrammatical if considered independently:

(17a) I'm not sure that Jack is doing anything at the moment.

(17b) *Jack is doing anything at the moment.

The ill-formed subordinate clause (17b) differs from the well-formed negative sentence (18a) only in being affirmative:

(18a) Jack isn't doing anything at the moment.

The affirmative counterpart of (18a) is not (17b) but (18b):

(18b) Jack is doing something at the moment.

Note also the correspondence between the negative and the affirmative sentences in (19a) and (19b):

(19a) I won't visit him ever again.

(19b) I will visit him sometime again.

To account for this correspondence, Klima

proposes the INDEF incorporation (referred to in 4.1.) rule by which negative polarity items such as any, ever, and yet are derived transformationally from corresponding affirmative items, some, sometime, and already respectively, in the environment of the Affective element (that is NEG, Who of Questions), within the same clause and outside, determined by the scope of the NEG. The notion "in construction with" is introduced to determine the operation of the INDEF rule. NEG triggers the alternation of some to any in the constituents it is "in construction with," that is, the constituents over which the NEG extends its scope.

Klima also mentions other constituents restricted to negative constructions such as the modal need, until-phrase and certain idiomatic expressions like "can't help", etc. This is obviously a similar phenomenon though there exists no corresponding affirmative expressions or items from which the NEG favored constituents can be derived.

4.1.5: Problems in Klima's Analysis

Though Klima's analysis is the most systematic overall study of negation ever attempted, there are a number of facts left unaccounted for in his system. This section examines a few problems in each of the major

aspects of Klima's analysis: scope, negative-raising, multiple negation,³ and negative polarity items; and mentions a few important proposals offered as possible explanations for the data.

4.1.5.1: Scope

First, Klima's syntactic account of the scope of negation in terms of the concept "in construction with" and a differentiation drawn between sentential and constituent negation is inadequate. Logical scope ambiguities are not covered by Klima's analysis, as amply demonstrated by the Generative Semanticists. In fact, the sole or at least the primary motivation behind the Generative Semanticists' investigation was to seek explanations for scope ambiguities.

As Lakoff (1970) shows, Klima's treatment of scope, cannot account for the ambiguity in:

- (20) I don't beat my wife because I like her.

This sentence has two possible interpretations:

- (21) It is because I like my wife that
I don't beat her.
(22) It is not because I like my wife that
I beat her.

In reading (21), the scope of NEG extends over the

matrix sentence "I beat my wife" (see Jackendoff 1969:222-228, for the notion "verb phrase constituent"). But in (22), what lies within the scope of NEG is the subordinate adverbial clause "because I like her" and not the main sentence. This difference in what lies within the scope of NEG results in the two interpretations.

Klima's system does not deal with such ambiguities. Similarly, other ambiguous negative sentences with adverbials and conjunctions such as:

- (23) I don't eat my dinner early at home.
(24) No barber gives many customers both a shave
and a haircut. (Partee 1973:[56])

also pose problems for Klima's analysis.

The definition of scope varies from linguist to linguist. There has been a great deal of speculation as to what falls within or outside the scope of NEG, and how to determine the scope rule. Claudia Ross (1976) proposes an interesting NEG scope assignment strategy called the "rightmost principle of sentence negation". She shows, with examples from English and Japanese, that NEG selects the rightmost constituent that it 'commands', as the target for its scope, when the NEG occurs in an 'unmarked sentence'. She argues that "the rightmost principle is a function of the given/new

ordering of information in sentences" (C.Ross:424).

This means that NEG and the constituent within its scope form a unit functioning as the new information in a negative sentence. NEG changes 'given information' into 'new information.'

C. Ross' principle is also applicable in a reversed form to a language like Japanese, in which the ordering of information is in a new/given order. In this case, the leftmost principle operates where the scope of the NEG chooses as its target the leftmost constituent bearing the new information. This strategy appears to be an interesting one but its universal application remains to be tested.

Klima's syntactic mechanism for the determination of scope has been examined with reference to a language other than English in T.K. Bhatia (1973), and found to be deficient in handling logical scope. In his article "On the scope of negation in Hindi" Bhatia examines simplex and conjoined negative structures in Hindi, in which the surface structure position of the negative is generally fixed in a preverbal position. But the logical scope of NEG may extend over any of the following constituents or elements in the sentence: the entire sentence, the verb phrase, the noun phrase, the adverb, the participial phrases, postpositional phrases

or even just the aspect and tense of a verb. Bhatia claims that the notions of sentential and constituent negation as set up by Klima, therefore, fail to explain the scope ambiguity in Hindi negative structures, because some of the participial elements and adverbs do not constitute constituents (1973:23-24).

Furthermore, unlike English and other Indo-European languages, Hindi does not possess incorporated negative indefinites. This is characteristic perhaps of Verb-final languages. The same set of pronouns and adverbs are used by negative, positive, and yes/no question constructions. In negative sentences, these items are negated by a negative element in a fixed position, so that there occur no surface contrasts or order to show which constituent is negated. Klima's syntactic operation cannot explain the inevitable ambiguity in such sentences. A. Davison (1978) points out, that there are other syntactic devices in Hindi expressing emphasis and topic which help disambiguate these negative sentences. She shows that there is a clear "interaction between the syntactic devices available in the language and Gricean principles governing reasonable and cooperative conversation (Grice 1975), as well as some semantic universals not covered by pragmatic principles" (Davison 1978:23.)

However, Bhatia presents several examples to show that scope ambiguities do occur in Hindi and that Klima's analysis fails to account for the ambiguities. In fact, he argues that Klima's concepts of sentential and constituent negation lack syntactic or semantic motivation (See Bhatia 1973 for details).

An observation worth making here is that Newari shares certain basic characteristics with Hindi: it is a Verb-final language, it does not possess incorporated negative indefinites and the position of the negative element is generally fixed. A preliminary examination of Newari negative sentences indicates that Klima's scope rule will encounter similar difficulties with regard to logical scope in Newari. Therefore, we state our first hypothesis here: logical scope in Newari cannot be adequately accounted for by syntactic scope rule such as that proposed by Klima.

4.1.5.2: NEG-raising Rule

Klima's Negative Absorption rule is a very tentative and incomplete formulation of the NEG-raising rule. There are problems which his argument that a sentence of the type (25):

- (25) I don't think that he will get there until
after the game.

contains an underlying NEG in both the matrix and the embedded sentence (26), and that the NEG in the embedded sentence is absorbed by the NEG in the matrix sentence under certain conditions (see 4.1.3).

Klima proposed this rule to account especially for sentences with restrictive phrases and expressions such as until and modal need etc., which can occur only in negative sentences. In (19) however, until occurs in a positive sentence as a subordinate clause to a negative principal sentence. As an explanation for this phenomenon, Klima posits (26) as the underlying structure for (25):

- (26) I don't think that he won't get there until
after the game.

But the analysis would posit for sentence (27) an underlying structure (28):

- (27) I don't think that he is at home.

- (28) I don't think that he is not at home.

Sentences (27) and (28) are clearly not synonymous; (25) and (26) also are not semantically equivalent. Therefore, (25) and (27) cannot be derived from underlying structures (26) and (28) without causing a radical difference in meaning. The negative absorption rule is consequently inadequate.

Kiparsky and Kiparsky (1968) suggest that a more

adequate rule is NEG-raising, which simply raises the NEG from the embedded sentence into the matrix sentence when it contains certain non-factive verbs. The synonymy between pairs such as (29) and (30) will not be radically violated by the operation of the NEG-raising rule.

(29) I believe that he is not innocent.

(30) I don't believe that he is innocent.

The Neg-raising rule was initially proposed by Fillmore (1963), as a minor rule called negative transportation rule that applies to a relatively small number of a subclass of verbs -- non-factive verbs of mental state and one or two intransitives. It operates by moving the negative from the embedded sentence to the matrix sentence under certain conditions ,for example, after the verbs like want , or think which are themselves not negated. Fillmore's motivation for this rule was entirely semantic.

The negative transportation debate, since Klima, has focused on two questions: (a) what is the syntactic and/or semantic evidence for the existence of such a rule?; and (b) can the facts professdly accounted for by the negative transportation rule be explained by drawing attention to certain syntactic and semantic regularities otherwise, that is, is there need for such a rule?

Since the original motivation for this rule was semantic, R. Lakoff (1969) provides a new set of syntactic arguments in favor of the rule. Cattell (1973) and Jackendoff (1971) find such evidence as presented inconclusive. Jackendoff claims the phenomenon in question can be explained, perhaps more adequately by a semantic characteristic of Neg-raising verbs.

Stockwell, Schachter and Partee (1973) disagree with the NEG-raising hypothesis. They offer the following explanation, ". . . the synonymy of certain non-factive pairs . . . is best accounted for with the NEG generated in the clause in which it eventually appears, coupled with the following semantic observation: non-factives express "propositional attitudes" (a term due to Bertrand Russell); in some cases it happens that a negative attitude toward a positive sentence may be very nearly or perhaps perfectly equivalent to a positive attitude toward a negative sentence; this seems to be true when either (i) the attitude is a moderate one, such as think, believe, seem, or (ii) the attitude is dichotomous, such as true and false. When the attitude is a strong one such as claim or sure, however, the equivalence fails" (1973:255). Cattell (1973) attempts to widen the field of discussion by raising a new problem relating to

reversed structures. Horn (1975) is convinced that the NEG-raising rule can be shown to embody a fundamental syntactico-semantico-pragmatic process manifested throughout divergent language families and across distinct but systematically related classes of predicates. This claim, however, remains to be fully investigated.

4.1.5.3: Multiple Negation

Third, and perhaps the most important, Klima's analysis of one negation per sentence fails to handle simplex sentences in English with double and multiple negation. Klima is aware of this problem and notes sentences such as:

- (31) He doesn't often really not understand.

He suggests that two negatives are possible per sentence but with an intervening adverb. His deep structure configuration looks like this: S (WH) (NEG) (ADV) NEG (ADV) NOMINAL-PREDICATE. This shows that the base component of grammar imposes constraints on multiple negation.

However, this solution fails to account for the following sentences:

- (32) Never before had none of his friends come to one of his parties.

(33) Bill doesn't not visit his mother for nothing.

Example (32) contains two negatives without an intervening adverb, and (33) has three negatives.

Multiple negation poses a special problem because as Stockwell et. al. (1973) point out, there are usually "preferred" multiple sentence paraphrases for simplex sentences with multiple negation. Two common devices used for such paraphrases are 'there is/are' sentences and cleft sentences.

The issue is further complicated by the existence of a substandard dialect which uses double negation generally intended to express propositions containing only a single negation. The question of the grammaticality in such usage is controversial.

Moreover, an inquiry into the operation of multiple negation requires an adequate analysis of the scope of adverbs and negation. Quantifiers and the effects of reordering rules on semantic interpretation, for all these phenomena appear to be interrelated. No totally adequate explanation of multiple negation exists as yet, though alternative proposals have been offered by Jackendoff (1969), and McCawley (1973), claiming the superiority of interpretive and semantic solutions over syntactic ones (See Sections 4.2.2 and 4.2.3).

4.1.5.4: Negative Polarity Items

Klima introduced the Indefinite-incorporation rule to deal with negative polarity items (discussed in Section 4.1.4.). The operation of this rule is triggered by the presence of an affective element within the same clause or outside, as determined by the scope in terms of the structural relation "in construction with". This rule shows a number of inadequacies, two of which are presented below.

First, Ross (1968) points out that the some/any suppletion does not occur in sentences such as the following:

- (34) I never met that man who somebody tried to kill.
- (35) I didn't marry the woman who had some money.

Note that the affirmative polarity items occur in subordinate relative clauses. If these items -- somebody, and some in (34) and (35) are supplanted by negative polarity items -- anybody, and any respectively, by the proper application of the Indefinite-incorporation rule, ungrammatical sentences (36) and (37) are produced:

- (36) *I never met that man who anybody tried to kill.
- (37) *I didn't marry the woman who had any money.

The point in case here is that the indeterminate

items in the subordinate relative clauses cannot undergo some/any suppletion even if these items are "in construction with" NEG.

Ross then gives examples of sentences in which the some/any suppletion applies in relative clauses, though there is no affective element (as discussed by Klima) in the main sentence to trigger the alternation:

- (38) Anybody who ever swears at me better watch his step.
- (39) Everybody around here who ever buys anything on credit talks in his sleep.

These sentences indicate that there must be a separate mechanism or items for triggering the indefinites in the relative clauses.

Ross concludes from the above evidence that, (i) In relative clauses, the some/any alternation takes place only if there are certain determiners in the matrix clause such as no, any, every, all, a, the only, the first, the last, the Adj.+est; and (ii) this implies that Klima's Indefinite-incorporation rule (if it is applicable to the sentence in question) must precede the relative clause - some/any suppletion.

It is evident therefore, as Ross claims, that there are two types of some/any alternation rules: (i) Klima's Indefinite-incorporation rule is triggered by an

affective element (Neg, and Wh of Questions); and (ii) the some/any rule which applies to relative clauses is conditioned by certain determiners in the head noun phrase, as mentioned above (see Ross:1976, 72-73, 195).

Baker (1970) mentions two interesting sets of data: one, in which Klima's some/any rule fails to trigger the appropriate alternation, and second, in which the usually affirmative polarity items and expressions occur in subordinate clauses in negative environments, creating logical double negatives in complex sentences.

First, in sentence (40),

- (40) You'll never convince me that George didn't eat some of that pie.

the subordinate clause (41),

- (41) George didn't eat some of that pie.

is a perfectly acceptable sentence independently, but it does not convey the logical negation of the sentence

(42):

- (42) George ate some of that pie.

the corresponding negative sentence of (42) is (43):

- (43) George didn't eat any of that pie.

Following that logic, we can see that in (40), the Indefinite-incorporation rule fails to trigger the some/any suppletion.

Second, expressions such as would rather, and already are affirmative polarity items while lift a finger, be all that Adj., etc., are negative polarity items. Baker gives a number of examples in which the negatively restricted items occur in subordinate clauses without the triggering affective element in that clause, but instead a NEG in the main clause.

- (44) I'm not convinced that he was all that strong
four years ago.

Similarly, affective polarity items or expressions occur in subordinate clauses in the environment of affective elements, both in the matrix and subordinate clauses. For example, (45) is a complex sentence containing "logical double negatives".

- (45) There isn't anyone in this camp who wouldn't
rather be in Montpelier. (Baker 1970: ex. 18)

The subordinate clause in (45) contains an affirmative polarity item would rather which may not occur in a simple negative sentence, *"He wouldn't rather be in Montpelier".

Baker observes that a "polarity reversal" has taken place in this sentence, and that Klma's some/any rule fails to provide explanations for such occurrences. To account for this phenomenon, Baker modifies the

some/any rule to make it an appha rule "in which one application of the rule may nullify the effect of a previous application of the same rule" (1970:179).

The rule is given as follows:

(46)	Neg	X	[λ negative]	Y
	1	2	3	4
	1,	2,	[- λ negative]	4

"This rule would operate to change a feature attached to a given lexical node to [+negative] if it is [-negative] and to [-negative] if it is [+negative]. Because such affirmative polarity items as could just as well, would rather, and far cannot be matched with any corresponding negative polarity items, the proper operation of rule (30) requires the adoption of Jackendoff's proposal that lexical insertion be allowed to operate freely, with the requirement that lexical and derivational features agree at the termination of a derivation". (See Baker 1970 for the details of the operation of this rule).

We have dealt here with only three sets of data left unexplained by Klima's treatment of lexical polarity. Examination of other data have shown tht negative polarity items are licensed by a far greater range of expressions than just negation and question. Lexical items like rarely, few, only, and

seldom also trigger some/any suppletion, as shown by Ladusaw (1980) in the following examples:

- (46) I rarely ever eat anything for breakfast anymore.

- (47) Only John ever eats pizza for breakfast anymore.

Negative polarity is an extensively discussed topic in linguistics and philosophy. Significant contributions have been made in this area by Horn (1969, 1970, 1972), and Lasnik (1975). The more current studies on polarity and scope such as those by Fauconnier (1975), LeGrand (1975), Ladusa (1979), and Linebarger (1980) are pragmatically-oriented.

4.1.5.5: Conclusion

In conclusion, we observe that Klima's treatment of scope as well as of other diverse aspects of negation suffers from one fundamental limitation: inability to capture semantic generalizations. His analysis is exclusively syntactic, for he was working within a framework which does not consider semantics. His major concentration was only on the distribution of morphemes in sentences characterized as negative by syntactic criteria, and as such fails to handle multiple negation, logical scope, and structural ambiguities of various types in negative structures. These issues remain

unresolved despite several subsequent attempts to account for them semantically.

4.2: Semantic Approach to Negation

Lakoff, Carden and McCawley represent the Generative Semanticists' approach to negation. The central theses in the Generative Semantics theory briefly are: (i) there is no separate level of deep structure defined in accordance with the standard theory (Chomsky 1965) as the level after lexical insertion and before the application of transformations; (ii) syntax and semantics are inseparable; and (iii) the role of transformations and derivational constraints is to relate semantic representation to surface structures. With respect to negation, these writers focus largely on the scope semantics of negation and ignore relevant syntactic considerations. They investigate structural ambiguities in sentences like "one hundred soldiers shot two students" and demonstrate that the ambiguities are due to the interpretation of the scope of the quantifiers and negation, which is expressed by their order in the deep structure. Their principal contention is: if non-lexical ambiguities are represented in the deep structure, then the deep structure must be equivalent to logical structure.

In a series of articles, Lakoff (1968, 1969, 1970), and Carden (1967, 1968, 1973) develop the Higher Predicate Analysis Theory (HPA), according to which the quantifiers and negatives are main verbs of higher sentences in the deep structure. The scope of negation is determined in terms of command relationships. The hierarchical order of the predicates in the deep structure determines the meaning of the sentence and the Predicate Lowering Transformation determines the surface word order. Moreover, Lakoff (1969) introduces well-formedness conditions on derivations to prevent incorrect derivations and ensure correct correspondence between command relationships in the underlying structures and precede relationships in the derived structures.

4.2.1: Lakoff and Carden

Lakoff (1965) proposes for the first time that the problem of scope ambiguities in sentences such as the following (Example (20) is repeated here as (48) for convenience) can be adequately handled if the interaction of the adverbial phrase with negatives can be explained by treating the adverbs as higher predicates in the deep structure.

- (48) I don't beat my wife because I like her.

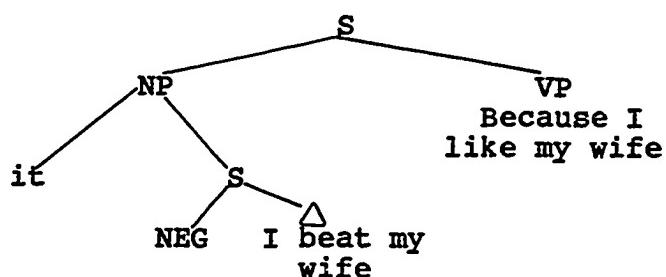
For instance, sentence (48) has two possible readings, as given in (48a) and (48b).

- (48a) It is because I like my wife that I don't beat her.

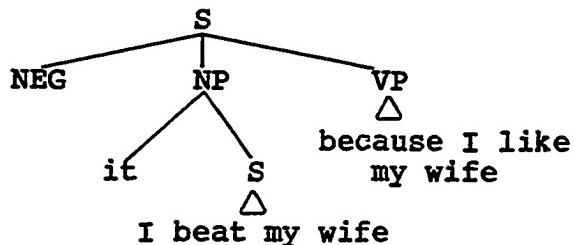
- (48b) It is not because I like my wife that I beat her.

The following abstract underlying structures are proposed for (48a) and (48b):

- (49)



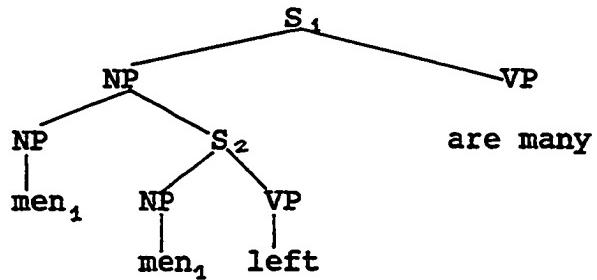
(50)



In (49), the adverbial phrase 'because I like her' is treated as a higher predicate and NEG is shown to extend its scope only over the embedded sentence. This represents the abstract deep structure for interpretation (48a). In (50), NEG is on the highest sentence, therefore the second interpretation (48b) occurs. This difference between the deep structures causes the scope ambiguities in sentence (48) above.

Following this logic, Lakoff proceeds to analyze instrumental and locative adverbials as higher predicates. Sentences with quantifiers such as "Many men left" are examined and observed to be synonymous with archaic expressions of the type: "The men who left were many." Lakoff proposes a higher verb analysis for the quantifiers too. The underlying structure for "Many men left" is claimed to be the following:

(51)



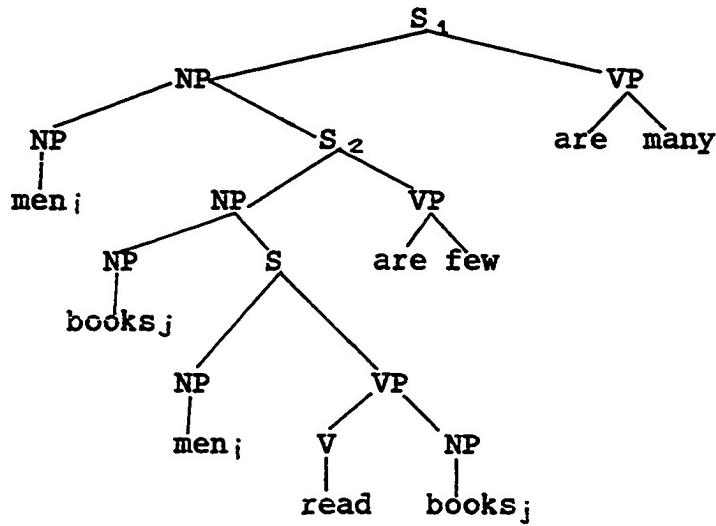
are many

Similarly, the non-synonymity between an active sentence (52) and its apparent passive counterpart (53) is explained by postulating the underlying structures as shown in figures (54) and (55) respectively.

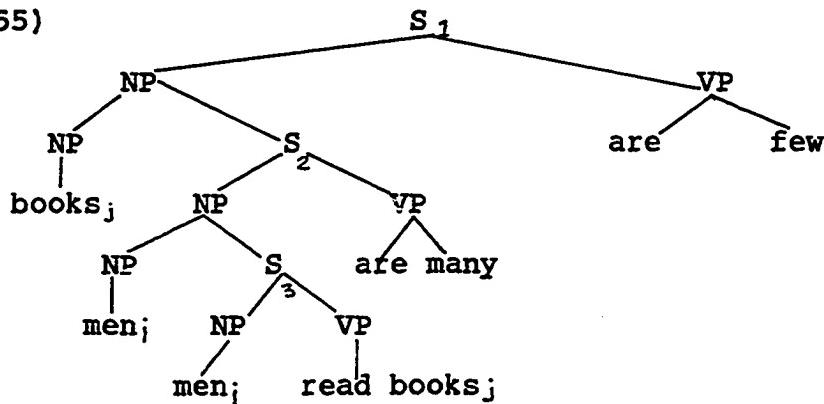
(52) Many men read few Books.

(53) Few books are read by many men.

(54)



(55)



The hierarchical order of the quantifiers analyzed as predicates in the underlying structures determine the interpretation of the sentence. By a cyclical rule of Quantifier Lowering (Carden 1967, Lakoff 1970), the quantifiers are lowered into their associated noun phrases, and the surface word order is

assigned. Thus, (52) is interpreted as "Many are the men who read few books," and (53) receives the meaning "Few are the books that many men read."

This analysis is extended to include negatives as well. In Lakoff (1969), we find a detailed discussion on the scope semantics of logical elements. He introduces global derivations, which he illustrates with the sentences given above as (52) and (53).

He argues that (53) appears to be the passive counterpart of (52), by the correct application of the passive rule. But (53) does not carry the same meaning as (52). It has a different interpretation:

(53a) There are few books that many men read.

(52) has the following interpretation:

(52a) There are many men who read few books.

Therefore, the passive rule must be blocked from applying to (52). In order to do this, Lakoff proposes the following derivational constraint:

(56) Let $T_1 = Q^1$ commands Q^2

$T_2 = Q^2$ commands Q^1

$T_3 = Q^1$ precedes Q^2

Constraint 1: $P_1/T_1 \supset (P_n/T_2 \supset P_n/T_3)$

where / means 'meets condition'

"Constraint 1 states that if two quantifiers, Q^1 and Q^2 occur in underlying structure P_1 , such that P_1 meets

condition T_1 , then if the corresponding surface structure P_n meets condition T_2 , that surface structure P_n must also meet condition T_3 . In short, if an underlying assymmetric command-relationship breaks down in surface structure, a precede-relationship takes over" (Lakoff 1969: 123).

Lakoff extends Constraint 1 to include negatives as well. Constraint 1' is stated as follows:

(57) Let $T_1 = L^1$ commands L^2

$T_2 = L^2$ commands L^1

$T_3 = L^1$ precedes L^2 (L=Q or NEG)

Constraint 1': $P_i/T_1 \supset (P_n/T_2 \supset P_n/T_3)$

Thus, quantifiers and negation now form a natural semantic class of predicates in Lakoff's system of derivational constraints.

Lastly, Lakoff argues that these constraints, which relate semantic command-relationships, operate on every level in the derived structure, not only on the deep structure or the surface structure. To include this, he now proposes Constraint 1'':

(58) Let $T_1 = L^1$ commands L^2

$T_2 = L^2$ commands L^1

$T_3 = L^1$ precedes L^2

Constraint 1'': $P_i/T_1 \supset ((i) (P_i/T_2 \supset P_i/T_3))$

(See Lakoff 1969: 121-131, for details on the operation

of these constraints.)

Thus, Lakoff and Carden attempt to capture the semantic generalizations with respect to scope ambiguities by proposing an analysis in which quantifiers, negatives, and adverbs are all represented as predicates in the deep structure, giving rise to similar scope ambiguities. An example showing the interaction of negatives and quantifiers can best illustrate this. The following sentence (59) is ambiguous; it can be interpreted to mean (60a) or (60b) or both.

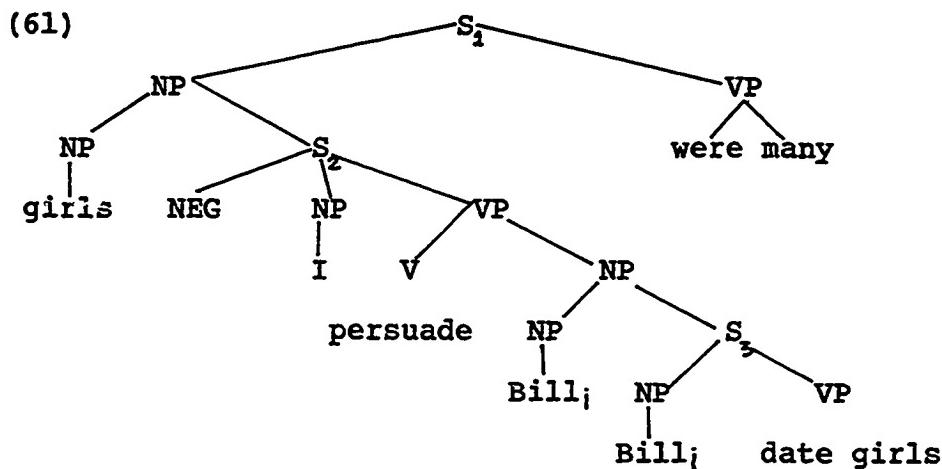
(59) I didn't persuade Bill to date many girls.

(Lakoff 1971: ex. 34a)

(60a) It is not the case that I persuaded Bill that the number of girls he dates should be large.

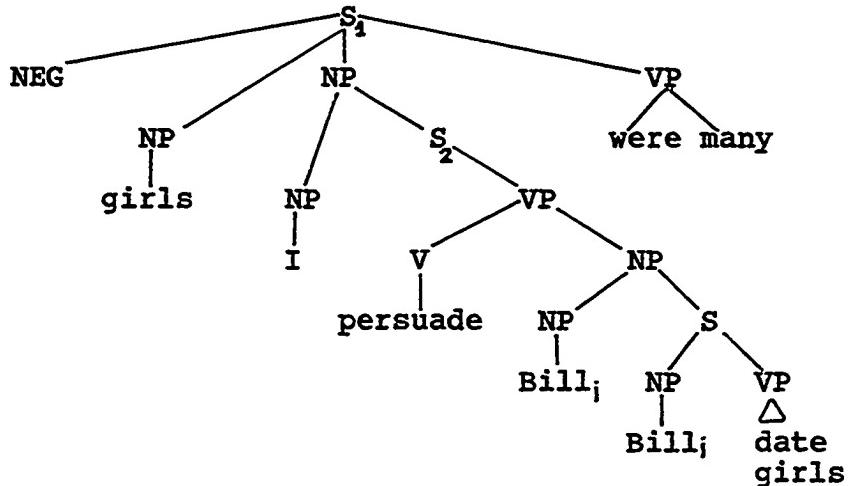
(60b) There were not many girls that I persuaded Bill to date.

In the underlying structure for interpretation (60a) as shown in (61), the quantifier commands the NEG:



The second interpretation (60b) is derived from the deep structure (62) in which the NEG commands the quantifier 'many':

(62)



This difference in the underlying scope domains of quantifier and NEG in terms of command relationships and the hierarchical order of the quantifiers and negatives in relation to each other in the deep structure gives rise to the ambiguity in (59). According to Lakoff, therefore, both quantifiers and NEG operate similarly with respect to scope and may be grouped together as a single semantic class of predicates.

4.2.2: McCawley

McCawley (1968, 1976) may be briefly mentioned here for two reasons: one, he basically supports the analysis of NEG as a higher predicate but suggests a slight modification of Lakoff's derivational constraint analysis in his article, "A Program for Logic" (1972).

Second, he claims that multiple negation is semantically not an impossible phenomenon, and therefore should not be restricted in the base component of the grammar. He argues that the grammaticality of sentences with multiple negation is not dependent on the way they are combined in the deep structure but rather on how they are ordered in their surface structures. McCawley suggests that the function of Perlmutter's Output Constraints, as applied to multiple negation, is to restrict the ungrammatical derivations. He believes that this solves the problem of accounting for multiple negation in the deep structure.

4.2.3: Problems in the Higher Predicate Analysis (HPA)

The HPA has been severely criticized on several grounds, but we propose to discuss here only four of the more serious problems that this analysis faces. First, the HPA fails to account for certain significant facts despite its professed objective to capture all semantic generalizations. One of the most compelling arguments is posed by Jackendoff (1971) when he shows how this analysis fails to account for the semantic difference between sentences such as (63) and (64):

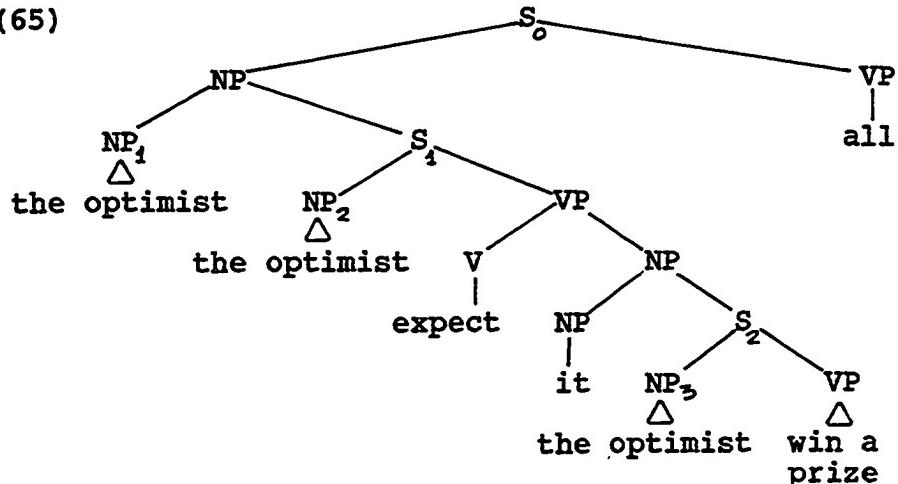
- (63) All the optimists expect to win a prize.

(Jackendoff 1971: ex.3)

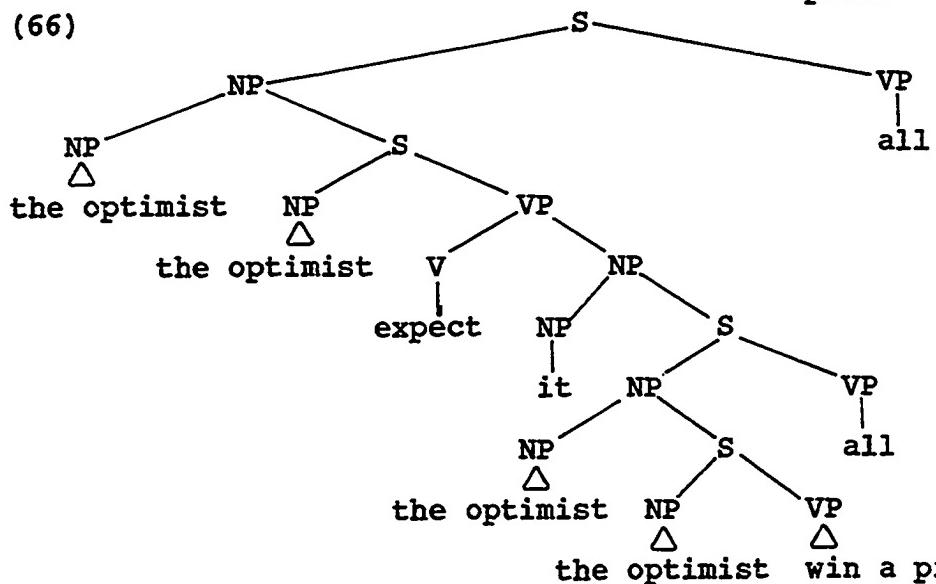
(64) All the optimists expect all the optimists to
win a prize. (1971:ex.4)

Carden (1968) postulates the following underlying
structures (65) and (66) for (63) and (64):

(65)



(66)



He argues that the semantic difference between (63) and (64) can be adequately explained if the Equi-NP deletion (Rosenbaum 1967) precedes the Quantifier-Lowering transformation operating on the underlying structures. He illustrates the details of this operation as follows:

In (65), Equi-NP deletion applies between NP and NP. Then the Quantifier-Lowering transformation applies,

deleting all structures above S, and moving all into NP. This produces the correct output string (63). In (66), however, Equi-NP deletion cannot apply in the only one context available, that is between NP and NP, because NP and NP are not identical. Quantifier Lowering moves all in VP NP, and all in VP into NP. The nodes S, NP; VP and NP are deleted as well as the lower nodes S, NP, VP and NP. Then NP is raised by the Subject-raising rule and the correct output string (64) is produced.

Jackendoff points out that this mechanical complex of transformational operations on distinct deep structures result in the correct output strings (63) and (64) as shown above, but the actual semantic difference in the interpretations of (63) and (64) is still not captured. The correct interpretation for (63) is that "each optimist individually expects himself to win a prize, but he does not necessarily have any expectation about the fate of other optimists". (Jackendoff 1971:286); whereas in (64) "each optimist is concerned with the fate of all optimists." (1971:286)

The semantic problem here is of accounting for the distinction between the individual to individual coreference in (63) as opposed to "the plural, quantified, and generic" (1971: 286) sense in (64).

The HPA does not resolve this semantic problem and therefore fails to capture a significant generalization, as correctly indicated by Jackendoff.

Partee (1970) examines the interaction of negation, conjunction and quantifiers, and discovers that though the HPA can account for certain semantic facts, for instance, resolve scope ambiguities in sentences such as (67) and (68), it fails to explain all the clearly semantic facts related to (67) and (68) and other similar structures.

(67) Few rules are both explicit and easy to read.

(Partee 1970: ex.1)

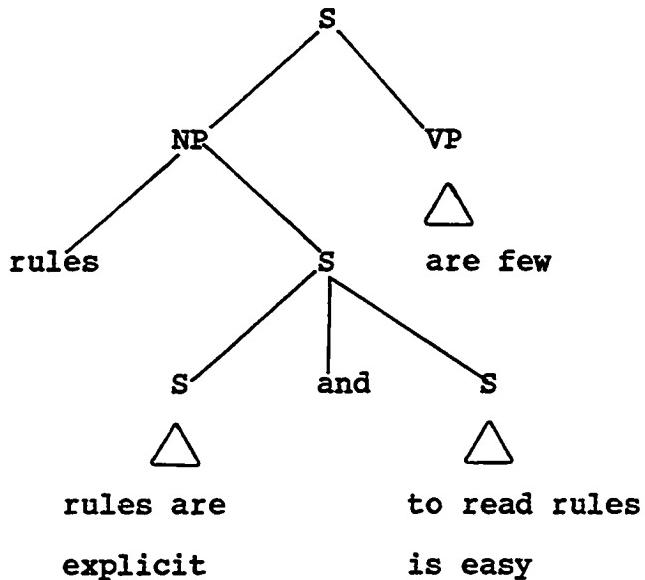
(68) Few rules are explicit and few rules are easy to read. (1970: ex.2)

Sentence (67) has the conjugation contained within the scope of a single quantifier, whereas in (68), the conjugation lies outside the scope of quantifiers.

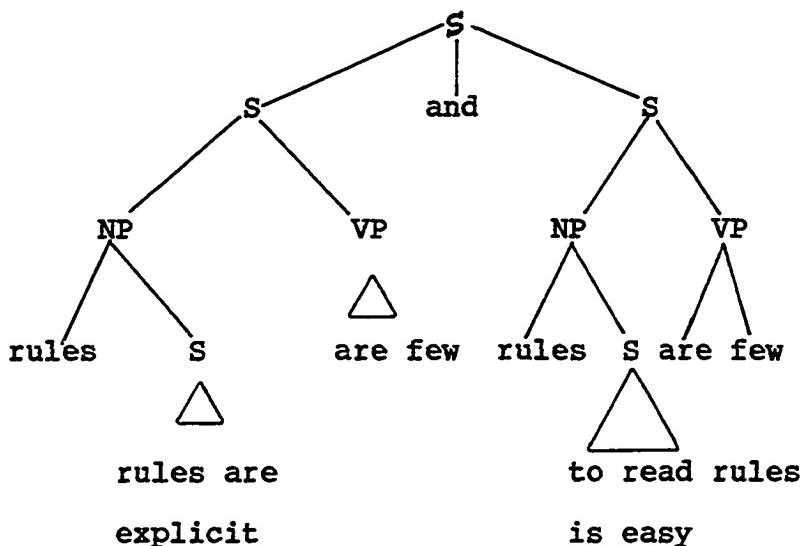
The semantic distinction between these two sentences can be accounted for by positing the following two underlying structures (given in diagrams (69), and (70)), in which the relative domination of conjugation and quantifier explains the semantic difference between (67) and (68) respectively. So far, the analysis is substantiated. The following diagrams are from Partee

(1970).

(69)



(70)



Partee now points out the difficulties encountered by this analysis. First, Partee notes that

semantically (68) implies (67), but not vice versa. However, if many is substituted for few in both sentences, the direction of the implication is reversed. Now (67) implies (68).

But in the underlying structure, even if many replaces few, we find no basis for predicting the change in the direction of the implication. In other words, the underlying structures cannot provide any explanations for the reversal in the direction of implication when few is replaced by many. This points to a deficiency in the analysis.

Partee also shows that the tendency in the HPA to claim ambiguities in sentences where the ambiguity may be either marginal or non-existent lead to serious problems. For example, Lakoff (1965) claims ambiguity for the sentence "Did many inmates escape?" by suggesting two distinct deep structures, and the possibility of deriving quantifiers from lower sentences. He also claims that a quantifier can be embedded within any NP, but only the subject NPs can combine with a quantifier from the next higher sentence. Partee argues that the second part of this claim is false, because if in (71), it is presupposed that some people read books, and the number of people "few" who read books is questioned:

(71) Do few people read books? (Partee 1970: ex.20)

(72) Does John read many books? (Partee 1970: ex.26)

the reading of some books by John is presupposed, and the many number of books read is questioned.

Partee remarks that "this line of reasoning would require the possibility of incorporating a matrix sentence quantifier into at least both the subject and object NPs of embedded sentences." (Partee 1970:160)

This means that both (71) and (72) can derive their quantifiers from higher sentences. But if this is done, combined with the possibility of deriving quantifiers from lower sentences, then a sentence such as (73) will have a superabundance of available deep structures". (1970:160)

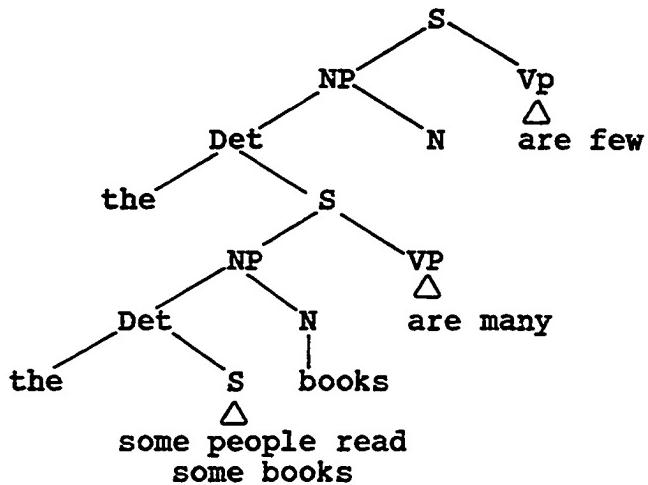
(73) Few people read many books.

Following Lakoff's line of reasoning, the possible underlying structures for (73) are :

- (i) underlying structure as shown in diagram (74).
- (ii) underlying structure as shown in diagram (74) with quantifiers interchanged,
- (iii) and (iv) one quantifier in a higher sentence, the other in an embedded sentence,
- (v) both quantifiers in embedded sentences.

(See Partee 1970:161)

(74)



This means that (73) can be claimed to be five ways ambiguous. But native speakers of English would not consider this sentence more than two or at the maximum, three ways ambiguous.

The HPA thus predicts more levels of ambiguities in a sentence than is possible.

(The readers are referred to Partee (1970), Jackendoff (1971, 1972) and Chomsky (1972) for further examples of semantic facts not accounted for by the HPA.)

A serious charge against the Generative Semantics approach to linguistic theory on the whole is that, "its theoretical excesses and abstract underlying structures serve as a breeding ground for irregularity" (Brame 1976:25). The theory is criticized both for its

lack of adequate syntactic evidence for its proposals, as well as for introducing inexplicitly formulated ad hoc transformations. The HPA, for instance, gains most of its syntactic plausability from debatable evidence. The Quantifier-Lowering transformation, a key rule in the HPA, is an arbitrary, unconventional and inexplicitly formed transformational rule. Justification for these criticisms are discussed below.

First, Lakoff's hypothesis (1970) that quantifiers, negation and various adverbial types are predicates in the underlying structures is initially drawn from the evidence of structures such as:

(75) The men were many.

According to Lakoff, this is an archaic rather than an ungrammatical sentence. In fact, quantifiers such as many and few did occur once in predicate positions. Even in present day English, sentences such as:

(76) The men were {many} in number

{few}

are perfectly acceptable. With this insufficient syntactic evidence, Lakoff claims that an underlying predicate position be postulated for all quantifiers. The Quantifier-Lowering rule is made obligatory for all quantifiers.

In other words, Lakoff's primary syntactic

motivation for this analysis is the reconstruction of the earlier stage as an underlying structure. This can, by no means, be considered in itself, a sufficient syntactic motivation.

Furthermore, with the exception of the quantifiers many and few, no other quantifier or logical element occurred in predicate position even archaically. Therefore, an analogous treatment of all logical operators based on the only syntactic evidence given above is untenable.

Second, the Quantifier-Lowering transformation violates the traditional pattern of operation of such transformational rules as passive, Equi-NP deletion, subject-raising, etc., in two ways:

- (i) it is a downward insertion rule which inserts lexical material from a higher matrix clause into a lower clause and,
- (ii) it can delete a main clause.

Both of these operations are unprecedented in the traditional battery of transformations. In fact, Chomsky (1965:146), and Bresnan (1970) have mentioned specific constraints on downward movement rules, but these constraints have also been violated by Lakoff's Instrumental Rule (1968), and Ross' Performatice Deletion Rule (1970).

Moreover, the Quantifier Lowering transformation is an extremely complex rule but the details of its operation in terms of its relation to other transformations have not been explicitly formulated. No account is also given as to the internal derived structure of the NPs into which the higher predicates are lowered. For these reasons, this rule is looked upon as a highly suspicious one.

In brief, the HPA fails to place adequate emphasis on syntactic considerations such as the form of the transformations involved, and the derived constituent structure of the sentences affected, apart from the insufficient syntactic evidence offered for the proposal. Consequently, irregularity both in the syntactic and semantic treatments of the phenomena covered is inevitable. Chomsky (1972:106) also attacks te structures themselves.

Fourth, Lakoff's claim that the underlying structures posited in the Generative Semantics theory are close approximations of the 'logical form' of sentences is disputed by Lasnik (1972), with particular reference to the HPA.

Lasnik disagrees with Lakoff's view (1969) that all adverbs, quantifiers and negation can be grouped into a single semantic class of higher predicates. The

sole motivation behind this classification was to seek explanations for scope ambiguities. Lasnik concedes that certain scope phenomena are adequately accounted for within this theory, but apart from this, Lakoff fails to consider the semantic implications of the structures he proposes.

Different sets of quantifiers, adverbs and negation behave in non-similar ways semantically, with respect to what they predicate. In fact, even from within the single class of quantifiers, many, few, and numerous reveal semantically distinct properties from those of all, some, and every. For example, underlying a sentence like, "Many men came", Lakoff presents a deep structure in which many is predicated of men, but in Lasnik's opinion, "there is no obvious way in which manyness is a property attributed to men" (Lasnik 1972: 114).

Rather, the quantifier actually attributes a property to the size or cardinality of the set containing the subject NP. Thus, many, few, and numerous possess the semantic property of describing the size of a set.

On the other hand, all, some, and ever refer to a certain proportion of a given set, and not its size. These quantifiers cannot be said to be

predicates on either the NP or on the cardinality of the sets containing the NP. (See Lasnik 1972 for details of this argument)

Lasnik argues therefore that since there is a clear distinction semantically between the two sets of quantifiers mentioned above, they should be represented by two distinct underlying structures, if underlying structures reflect logical form, as Lakoff claims. Instead, contrary to his own stated claim, Lakoff proposed an identical analysis for both sets, ignoring the semantic distinction between the two.

Lasnik advances another set of examples as further counter evidence that Lakoff puts up against his own theory as a result of inconsistencies in his (Lakoff's) arguments. In Lakoff's system, not, and often are treated as predicates taking sentences as arguments. Locative adverbials are also generated in the same predicate position. But, whereas the set including not, true, false, etc., can be "thought of as predicates on propositions" (1972: 116), the second set containing locative and frequency adverbials are "predicates not on propositions but on events." (1972: 116) Therefore, not, and often cannot belong to the same class semantically, nor have similar underlying structures. The HPA however posits identical deep

structures for both sets and thus supports Lasnik's argument that Lakoff's underlying structures do not represent 'logical form' of sentences.

The HPA was initially proposed for quantifiers, and later extended to incorporate negation and adverbs as well. The Generative Semanticists do not intend to offer a comprehensive theory of negation. Analysis of negation is confined to treatment of scope ambiguities of negation in interaction with quantifiers and adverbs. In an analogous vein with quantifiers and adverbs, negation is merely analyzed as a higher predicate taking a sentence negation only and excludes any discussion of constituent or other kinds of negation. The scope semantics of negation is handled somewhat adequately as discussed in the sections above, but other phenomena related to negation are not dealt with at all.

4.2.4: Conclusion

To summarize, the HPA focuses on the scope semantics of negation, quantifiers and adverbs and advances explanations of certain scope ambiguities in terms of underlying higher predicates and command-precede relationships. However, it fails to account for some significant semantic generalizations pertinent to them. The principal weaknesses of HPA are

to be: (a) failure to consider the semantic implications of the structures proposed, (b) insufficient syntactic evidence and syntactic motivation, (c) inconsistency in argumentation, and (d) an ill-formulated and inexplicit transformational rule.

4.3: Interpretive Approach

Jackendoff (1969) introduces a radically new approach to negation in his interpretive theory. He rejects the Katz-Postal hypothesis that all semantic interpretation can be captured in the deep structure, and argues that there are semantic interpretive rules operating on derived structure, which can adequately capture the generalizations concerning quantifiers and negation. He claims that the total interpretation of negation depends on derived structure and therefore presents the possibility of generating NEG in its surface structure constituents. He proposes two interpretive rules: a lexical version of the some/any rule and an interpretive rule of scope.

Jackendoff's principal arguments involve the following three topics which are summarized below: (a) meaning difference depend on derived structure, not on the deep structure alone, (b) the lexicalist version of

the some/any rule, and (c) the interpretive scope rule, are summarized below.

4.3.1: Jackendoff

First, Jackendoff argues that NEG must be generated in positions other than as daughter of S, to handle instances of non-sentential negation which Klima characterizes as constituent NEG in sentences such as the following:

- (77) They're fighting about nothing.
- (78) Many of the arrows didn't hit the target.

These and the following examples are taken from Jackendoff (1969). Sentence (77) cannot be derived from an underlying sentential NEG, because there is not sentence in nothing. The NEG is semantically associated with the NP. Jackendoff contrasts (78) with (79):

- (79) Not many of the arrows hit the target.

and states that (79) is an instance of sentential NEG while (78) is a case of VP NEG. (79) can be derived from an ordinary sentential NEG of "Many of the arrows hit the target." Not is placed before many by the obligatory incorporation of NEG into the first indefinite item before the auxiliary.

But (78) cannot be derived by the rule of sentential NEG, since NEG is not attached to many by

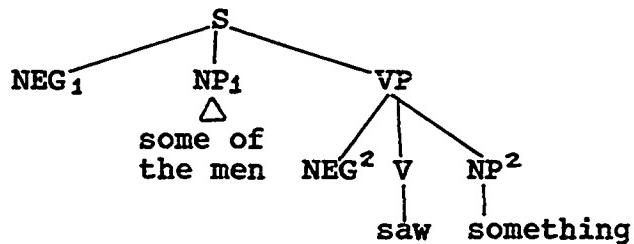
the obligatory NEG placement, but is actually associated with the auxiliary. This is an instance of VP NEG.

Jackendoff uses the structural relation "in construction with" to show how the Indefinite-Incorporation rule also operates in a way that clarifies the difference in meaning between sentential NEG and VP NEG. In examples (80) and (81) shown below, (81) is sententially negated while in (80) the NEG is associated with the VP.

- (80) Some of the men didn't see anything.
- (81) None of the men saw anything.

Diagram (82) shows clearly how the notion "in construction with" brings out the distinction between the VP and sentential NEG.

(82)



In sentence (81), NP^1 and NP^2 are "in construction with" NEG^1 , but in (80) only NP^2 is "in construction with" NEG^2 . This results in sentential NEG in (81) and VP NEG in (80). In (80) NEG is associated only with the VP.

Jackendoff proceeds to argue that sentences with VP NEG as in (78) and (80) have no passive counterparts. Similarly, if we note passive sentences such as (83) and (84), we find, according to Jackendoff, that (83) has an active counterpart, but (84) does not.

- (83) Not many of the demonstrators were arrested
by the police.
(84) Many of the demonstrators weren't arrested
by the police.

However, if sentences (78) and (79) did not possess quantifiers in their subjects, they would have a synonymous active:

- (85) The arrow did not hit the target.

Jackendoff interprets the NEG in (85) as having both a sentential scope and a VP scope. But the VP NEG in (85) is logically synonymous with the sentential NEG, except in its topic-comment relations. He concludes from this evidence that the difference in meaning between the VP NEG and sentential NEG in a sentence such as (85) appears to be significant only when there is a quantifier in the derived subject. The occurrence of the quantifier many in (83) and (84) as well as in (78) and (79) causes the difference in meaning.

Jackendoff (1969:228) now observes: "Since the possibility of the difference in meaning is dependent on

the derived subject, and not on the underlying subject, a theory that requires all semantic information be captured in the deep structure cannot express this generalization."

4.3.2: Some/Any Rule

Jackendoff notes that the negative polarity items such as any, ever, yet should be treated as basic lexical items included in the lexicon and not as morphologically distinct items derived by a transformational rule from corresponding affirmative items as found in Klima's analysis.

He gives two reasons for such a claim: first, there is absolutely no morphological similarity between pairs such as some/any, sometime/ever, and already/yet; and second, there are other negative polarity items, at least two such as at all, and any more, which cannot be derived from any affirmative polarity items.

Therefore, following the lexicalist hypothesis proposed for nominals by Chomsky (1968), Jackendoff formulates a lexicalist version of the some/any rule. This rule treats pairs such as some, and any as separate lexical items, differing by a feature [X], that is, if some is [+X], any is [-X]. Rules of semantic

interpretation are proposed that specify which value of the feature must appear in what environments.

Jackendoff states this rule as follows:

[-X] "in construction with"	
[+indeterminate]	Affective
[-X] elsewhere	

The convention for the application of the rule is as follows: "If an indeterminate is unspecified with respect to X, the rule fills in the feature according to the environment. If the indeterminate is already marked with respect to X, the sentence is marked semantically anomalous, if the inherent feature and the feature assigned by the rule disagree" (1969:232).

Jackendoff claims that this interpretive some/any rule can capture features of semantic relevance and contribute to the interpretation of a sentence in which feature X has not been specified on a NP. He illustrates this with the following examples:

(87) John bought a house.

(88) John didn't buy a house.

Though both sentences contain the indefinite article a, there is a semantic difference in the readings of this article a in (87) and (88). Jackendoff argues that

this difference in meaning is due to the presence of NEG in (88). In (87), a house is specific, that is, a specific house has been bought by John, but in (88) the interpretation of a house is non-specific.

Jackendoff provides other examples to show that in affective environments, a is interpreted as non-specific:

(89) John is too tired to buy a book.

(90) John is too reluctant to buy a puppy.

That is, in general, the feature [-X] seems to imply [-specific].

Jackendoff's some/any interpretive rule "provides the feature that permits interpretation of specificity" (1969:234) on the derived structure. Therefore, the indefinite article a may be left unmarked for specificity in the deep structure. According to Jackendoff, Klima's some/any rule fails to capture the difference in interpretation of a totally, because Klima's rule is not semantically motivated. Since interpretation is based only on deep structures in Klima's system, two separate lexical items, a, one specific and the other non-specific must be posited. The Indefinite-Incorporation rule then blocks the incorrect derivation. Jackendoff's lexicalist version of the rule suggests an important improvement on

this by treating yet/already, some/any, etc. as separate lexical items with different semantic interpretations on morphological and semantic grounds.

4.3.3: Interpretive Scope Rule

Jackendoff's initial discussion of the scope of negation assumes that NEG is generated in the deep structure at the position required for the interpretation of the scope. He defines the scope of NEG as that part of sentence which is interpreted as being denied. In sentential NEG, the scope of NEG is the whole sentence, but in constituent NEG, it is not easy at times to distinguish exactly what segment of the sentence is being denied.

Jackendoff suggests one solution, which is to identify the scope of NEG with various subtrees in the derived structure of the sentence. For example, in (77) above, repeated below for convenience, there are two possible interpretations: (i) it is denied that they are arguing, and (ii) it is acknowledged that they are arguing but denied that there is a good cause for it:

(77) They are fighting about nothing.

In reading (i) the scope of NEG extends over the whole sentence, and in (ii) the scope is restricted to the NP nothing. Meaning differences depend on what part of the

sentence falls within the scope of NEG.

Furthermore, Jackendoff claims that even if the quantifier is absent in the derived subject of the sentence, the scope of NEG in sentential NEG and VP NEG vary. For example, in the sentence "The arrow did not hit the target", Jackendoff argues for both sentential and VP NEGS. In the VP NEG, it is denied of the arrow that it hit the target, and in the sentential NEG, it is denied that any such act as "hitting the target" took place. The truth values of both these readings are equivalent, but they differ in emphasis. However, if a quantifier is present in the derived subject, the truth values change as we have discussed in 4.3.1. The notion "within the scope of NEG" therefore appears to be semantically correlated to the structural relation "in construction with" used in the some/any rule.

Jackendoff seeks to describe the semantics of scope by constructing a surface structure interpretive rule. Scope semantics are no longer represented in the deep structure.

The semantic scope of NEG is determined in the following manner. The NEG is first generated in the surface strcture position. The scope rule can raise the NEG optionally from the node to which it is attached up to any dominating node, on condition that there are no

logical elements attached to the dominating node to the left of the raised NEG. That is, "the principle of the scope rule is expansion of the scope of NEG to larger and larger constituents" (See Jackendoff 1969:235-236) for details).

The some/any rule (discussed in 4.3.2) operates in the output of the scope rule, and basically states that the indefinites can occur only within the scope of NEG and in no other position. This scope rule is slightly modified in Jackendoff (1972). First, everything occurring to the right of the NEG and commanded by it in the surface structure, falls within the scope of NEG. Second, the concept "the scope of negation" no longer refers to the structural relation "in construction with." Third, the scope of negation does not depend on any constituent structures other than S nodes. In brief, Jackendoff treats negation as a modal operator, working on the surface structure of sentences on everything commanded by the negative morpheme and lying to the right of NEG.

4.3.4: Shortcomings in Jackendoff's Analysis

There are two major shortcomings in Jackendoff's analysis. First, he avoids certain kinds of structures in his analysis and concentrates exclusively on

sentencees with quantifiers in the subject with the construction Quant-of-Det-Nouns (e.g. many of the arrows) etc. These constructions are unusual and display peculiar behavior in many other syntactic contexts. In fact the major part of Jackendoff's argumentation falls apart if these constructions are replaced by non-quantified NPs.

Jackendoff (1969: 230) states: "... the interpreted scope of negation is always associated with a particular node in the tree. Under this assumption we would not expect to find cases where we can identify the scope of negatation, say, with the subject and verb of a sentence but not the object, since any node dominating both the subject and the verb must dominate the node VP and thus the object." He fails to analyze sentences such as the following (Baker 1970: 137) which provide counterexamples to his claim.

- (91) He didn't like some of the girls.
- (92) Peter insulted Mary, not Mary Peter.
- (93) I couldn't find some of my old toys in any of the boxes in the attic.
- (94) Nobody has given any food to some of these dogs.
- (95) Some of the girls nobody gave anything to.

Sentence (95) for instance, in which the NP in the predicate has been topicalized to sentence initial

position, is neither an example of sentential NEG nor VP NEG, nor even NP NEG, because any in the direct object shows that this constituent falls within the scope of NEG. The elements negated in sentence (95) are subject, verb, and direct object, the combination of which does not represent a single constituent.

Similarly, in (91) only the verb is negated, and in (93), only the postpositional phrase lies within the scope of NEG. In other words, the scope of NEG cannot be associated only with a particular node in a tree. Therefore, as Baker (1970) remarks, these sentences "raise serious doubts about the validity of such supposedly semantic notions as 'verb phrase negation', 'noun phrase negation' and so forth" (Baker 1970: 137). Stockwell-Schachter-Partee (1973) also note the fact that Jackendoff's theory does not handle non-continuous negation.

Second, Jackendoff's formulation of the scope rule has been shown to be faulty. Lasnik (1972) demonstrates very clearly an "inconsistency in the description of the operation of the scope rule" (1972:154). The claim that scope semantics is determined on the basis of derived structure relies on the evidence of sentences like the following:

- (78) Many of the arrows didn't hit the target.

(79) Not many of the arrows hit the target.

(96) The target wan't hit by many of the arrows.

Sentence (96) can be the corresponding passive form of either of the two sentences (78) and (79), but for Jackendoff, (96) is the passive of only (79). Scope rules in these sentences cannot be determined, therefore, before the application of the passive transformation. In the underlying structures, many is outside the scope of NEG in (78), and within the scope of NEG in (79). In both cases there is no possibility of scope ambiguity. In (96), many is within the scope of NEG, whether VP scope or Sentential scope is claimed. This again precludes the possibility of scope ambiguity. Following this line of reasoning, all three sentences are unambiguous.

Now observe the following examples.

(97) No one saw something.

(98) No one saw anything.

Lasnik shows how (97) can only take NP scope, not sentential scope, because a 'definite' would be dominated by NEG otherwise, resulting in an anomalous sentence. In (98), on the other hand, the NEG must take full sentence scope, otherwise an indefinite not being dominated by NEG produces anomaly. These two sentences, therefore, are logically non-synonymous.

A similar relationship as in (97) and (98) holds in another set of sentences:

(99) He didn't finish some of his work last night.

(100) He didn't finish any of his work last night.

In the deep structures of both sentences, the direct object position is within the scope of NEG. (99) is therefore incorrectly predicted to be anomalous, since a definite quantifier some falls within the scope of NEG. But we know that (99) is a grammatical sentence. To account for this phenomenon, Jackendoff later argues that it is possible for negation to remain on the auxiliary alone. This stipulation makes (99) acceptable, because the domination of NEG does not now extend over the direct object position.

However, a major problem arises here concerning his initial argument that (96) is the passive counterpart of (98) only. If we allow NEG to remain on the auxiliary alone, (96) becomes ambiguous between (97) and (98). An incorrect prediction against his initial claim is made. This inconsistency in Jackendoff's argument undermines the validity of his formulation of the scope rule.

4.3.5: Conclusion

To summarize, in his interepretive theory of negation, Jackendoff attempts to demonstrate the relevance of surface structure to semantic interpretation. In his principal contention that it is possible to explain many semantic phenomena (for example, the scope of logical elements) in terms of the surface structure features, he supports Chomsky's claim that: "such matters as focus and presupposition, topic and comment, reference, scope of logical elements, and perhaps other phenomena are determined in part at least by properties of structures of K other than deep structures, in particular, by properties of surface structure" (Chomsky 1971: 213).

4.4: Lasnik (1972)

Lasnik makes the first significant attempt to formulate a unified theory of the syntax and semantics of negation based on the insights presented in the earlier works of Klima, Jackendoff, Lakoff and Carden. He tries to integrate the exclusively syntactic analysis of negation into the semantic analysis pertaining specifically to the scope semantics of negation. He proposes two analyses: the Determiner theory and Pre-S theory, and argues that the Pre-S theory has better explanatory adequacy than the Determiner theory, both on syntactic and semantic grounds. He also considers the semantics of the quantifier any and shows that it is a universal quantifier which lies semantically outside the scope of negation always in negative sentences. I present here an outline of the fundamental features of his analysis and his major arguments.

4.4.1: Deep Structure Position of Not

First, a preliminary examination of the surface distribution of lexical items not in phrases containing not and a quantifier such as not many, not often, etc., shows that constituents with not in sentences like those given below, can only occur in subject position, while the corresponding constituents

without not can occur freely.

(101) Not everyone saw the movie.

(102) Not all of the problems were solved
by the students.

(103) Not often do I go home.

According to Lasnik, these sentences show that not + quantifier + NP is permitted only in the subject position, while not + adverb is allowed only in initial position.

Lasnik notes that Klima's postulation of Pre-S position for NEG in the deep structure can account for the occurrence of not in the sentences above, but grammatical sentences with double occurrences of not as in (104) and (105) are still not accounted for:

(104) Not often do I not pay my taxes.

(105) Not many of the girls didn't
come to the party.

Lasnik suggests that not must be generated in the auxiliary position too, in addition to the Pre-S position, that is, two deep structure positions are proposed.

According to the Determiner theory not is generated optionally in the determiner of NPs and certain types of adverbial phrases in the deep structure, and potentially in the auxiliary underlying

sentences such as the following:

- (106) Not many people saw the accident.
- (107) Not all of the boys read the book.
- (108) Not often do I see her.

A serious problem faced by the Determiner theory is that phrases like not many, and not at all can be the subjects of passive sentences, but not the object of active sentences. These phrases can occur as the subjects of active sentences but not the by-phrase of passive counterparts. Therefore, a rule must be constructed to block the incorrect derivations.

Lasnik proposes an obligatory Not-Shift transformational rule for this purpose. This rule shifts a not occurring in the determiner of an NP to the right of the auxiliary after passive has applied. Not Shift is extended to apply also to adverb phrases of the type shown in (108).

In the Pre-S theory, not is generated both sentence initially and in the auxiliary. Therefore, no special transformation is necessary to explain the non-occurrence of not phrases in other than initial position.

Though both the Determiner theory and the Pre-S theory can account for the major syntactic facts about negation, Lasnik argues that the Pre-S theory offers a

better account of the two adverb classes: Class I constitutes of adverbial phrases such as not long ago, not infrequently, not long after, etc., and Class II consists of derived not-adverb constructions such as not always, not often, not until, etc. These two adverbial classes though superficially similar, differ in significant syntactic and semantic respects. Lasnik enumerates the syntactic differences as follows: Class I adverbial phrases are generated "whole," have free distribution and do not trigger Subject-Aux. Inversion; Class II adverbial phrases are derived, can occur only sentence-initially, and require Subject-Aux. Inversion.

Lasnik's preliminary examination of relevant data had shown that sentences in which not adverbs occur in non-initial position are ungrammatical. But there are perfectly grammatical sentences in which adverbs with not enjoy free distribution:

(109) I was sick not long ago.

(110) I have a friend not far from here.

The relevant adverbials have the same distribution with or without not.

(111) I decided (not) long ago to study medicine.

The Determiner theory fails to account for the distribution of Class I adverbs as distinct from the

restricted distribution of Class II adverbs, because this theory generates not in the specifier of adverbs in the deep structure in the same manner for both adverb classes.

Within the Pre-S theory, Lasnik proposes an analysis in which not in Class I adverbial phrases is generated by the phrase structure rule, within the adverbs in which it appears. Not serves as an optional modifier. Not in Class II adverbial phrases is generated pre-sententially and later transformationally relocated.

Thus, syntactically, the Pre-S theory is shown to be more adequate in handling this significant distinction between the two adverbial classes.

4.4.2: Scope

Lasnik uses the term 'scope' to mean the negation of a particular item. When an item is negated, it is within the scope of negation. He examines a wide range of data on the interaction of negation with quantifiers and adverbs in order to determine the circumstances in which an item can be negated. He states five broad generalizations:

- (a) A quantifier immediately preceded by not is obligatorily in the scope of negation, and the NP it

quantifies cannot be referential.

(b) When a quantifier follows not, though not immediately, it may fall outside the scope of negation, if the sentence has a special intonation contour.

(c) A quantifier occurring to the left of NEG is outside the scope of negation.

(d) If not commands and precedes a quantifier, the quantifier is within the scope of negation.

(e) If a quantifier occurs within the possessivized NP island constraint, it will not be negated by not outside of it.

Lasnik considers how these generalizations are captured by the proposed analyses. In the Determiner theory, since not can be generated in the determiners of NPs, adverbial phrases, as well as in the auxiliary, scope can be interpreted at the level of deep structure. Only a simple mechanism is necessary resulting in a simplified semantic theory. Transformations can apply without referring to that scope. The Determiner theory thus appears to handle scope in a simple straightforward manner.

However, as Lasnik shows, the Determiner theory runs into a number of difficulties, two of which are:

(i) failure to predict the close relation between intonation contour and scope, of which there is ample

evidence, and (ii) inability to distinguish between the semantics of the two types of adverbial classes mentioned in 4.1. Lasnik illustrates how not long ago does not correspond to the negation of an adverb or to a negative adverb. Transformations treat adverbs like not often differently from those like not long ago. In the Determiner theory, similar deep structures are postulated for both. Consequently, the semantic difference remains unexplained.

The Pre-S theory, on the other hand, provides for derived structure scope interpretation. Two derived structure interpretive analyses are proposed, differing only in ordering. In one analysis, the interpretation takes place at one late derived level, and in the alternative analysis, interpretation takes place at the end of each syntactic cycle. I will not go into the details about the operation of the cyclic rules and their orderings (See Lasnik 1972:66-101). Lasnik concludes that the Pre-S theory is more powerful than the Determiner theory, for it handles adequately the limitations mentioned above in the Determiner theory with particular reference to the adverbial classes.

4.4.3: Conclusion

In brief, Lasnik's syntactic analysis draws a great deal from Klima's Pre-S analysis and introduces significant modifications. Concerning scope semantics, Lasnik supports Jackendoff's theory of derived structure scope interpretive rules and concludes that the Pre-S theory is more powerful than the Determiner theory. One major drawback in his analysis is that they do not cover a number of other sentential elements such as prepositional phrases, etc., and therefore lacks comprehensiveness.

4.5: Pragmatic Approach

The pragmatic approach to negation reflects the currently prevailing view as stated succinctly by G. Fauconier (1975), "logical properties of sentences, such as quantification and scope, are not necessarily represented in a logical form, rather several factors, some of them pragmatic, may be at work to produce logical effects and scope difference." (1975:374)

The interpretation of the scope of logical elements such as quantifiers and negation is now considered a pragmatically determined phenomenon. Consequently, negation is analyzed in terms of

discourse, pragmatic presuppositions, conversational implicatures, entailment relations, etc., and the interaction of the pragmatics of negation with grammar or syntax is investigated. Topics like polarity and logical operators have been analyzed extensively in pragmatic terms by Fauconnier (1975, 1979), LeGrand (1974 1975) and Ladusaw (1979, 1980). Relevant points from one significant study in this direction - Givon (1978) - is briefly presented below to illustrate how important aspects of negation, treated syntactically and semantically a few years ago, are now pragmatically analyzed, leading to newer insights in this important aspect of language.

4.5.1: Givon

Givon (1978) in his insightful article, "Negation in Language: Pragmatics, Function, Ontology", makes three interesting claims:

- (a) In natural language, affirmatives and their corresponding negative sentences differ not only in their truth values (as in simple propositional logic), but also in their discourse presuppositions. The discourse presupposition of a negative speech act is its corresponding affirmative. That is, when a speaker asserts $\neg p$, he presupposes p . The presuppositional

background for negation in language, therefore, is highly complex and needs reformulation.

Givon first points out that most object-taking verbs such as read, see, and meet, which are implicative with respect to their objects, can take either referential-definite or referential-indefinite objects but never non-referential objects, as shown below:

- (112) Peter saw a movie. (ref. indefinite)
- (113) Peter saw the movie. (ref.-definite)
- (114) Peter saw any movie. (non-ref.)

But in negative sentences corresponding to 112-114 above, the verb can also take non-referentially interpreted object. The following sentence,

- (115) Peter didn't see any movie.

is perfectly acceptable. However, Givon argues that under negation the referentially-indefinite object tends not to appear, though grammatically such constructions are possible and acceptable. Similar facts with regard to definite and indefinite referentiality are also reflected in pronominalization.

On the basis of this evidence, Givon argues that referential object nouns are introduced, first in affirmative sentences as indefinites, and only appear as definites in negative sentences. Examples from

Hungarian, Bemba, and Modern Hebrew are given to reinforce the claim that such restrictions hold in languages other than English.

From this phenomenon, Givon draws the conclusion that in discourse, negative sentences do not introduce new arguments, that is indefinites. They are only used in contexts in which the referential arguments have already been introduced in the preceding context. In the negative sentences, these same arguments are referred to as definites. He states that, "in purely formal terms...the amount of definites and thus of discourse presuppositionality in negative sentences is much larger than in corresponding affirmatives. Or, in other words, negative sentences in language are uttered in more complex presuppositional contexts, the speaker uttering them ASSUMES MUCH MORE about what the hearer knows."

(1978:79)

Then he examines other discourse structure and shows that a felicitous discourse context for the negative is either the previous mention of the corresponding affirmative, or the belief or assumption on the part of the hearer that the corresponding affirmative is true or could possibly be true.

(b) Givon's second claim is that, since negative sentences are more marked presuppositionally, various

predictions regarding distributional restrictions, diachronic conservatism and psychological complexity can be made. Givon demonstrates how this pragmatic markedness of negation places two kinds of distributional restrictions on negation: (i) it and the structures embedded in it can not occur freely, and (ii) it can embed itself freely in other structures and contexts.

For example, in an affirmative sentence (116),

- (116) John told Bill to run again.

the ambiguity contained in the scope of the adverb 'again', as clearly marked by two distinct intonation patterns, can be interpreted in two ways.

- (117) (a) John told Bill to run.

- (b) John told Bill to run again.

In (117a), what John told Bill again was to run. The assertion-focus stress falls on run, characterizing it as the new information conveyed. In (117b), what John told Bill was to run again. The assertion-focus stress is on again, for again constitutes the new information.

Under negation however,

- (118) John didn't tell Bill to run again.

there is one reading possible, according to Givon. Contrastive intonation contours do not occur. This is so

because the negation is asserted in the context of the corresponding affirmative, having already been discussed. Neither run , nor again is new information. What is new in the negative sentence is the denial of the assertion. The assertion focus stress is assigned only to didn't .

Thus, the potentially ambiguous adverbial construction is restricted in the range of its possible interpretations by the pragmatic markedness of negation.

As illustration of restrictions on the embedding of negatives, Givon provides example of the type such as the following :

- (119) (a) She was as fast as he was.
- (b)? She was not fast as he was not.
- (c) She wasn't as fast as he was.
- (120) (a) There used to be a story that went
 like . . .
- (b)? There didn't used to be a story
 that went like . .

Givon discusses the pragmatic motivation for all these restrictions in terms of "the pragmatic contrast between NORM and COUNTER-NORM'. In example (119) for instance, in the affirmative sentence (119a), the degree of the presence of the same property is compared in two individuals. This constitutes the COUNTER NORM. In the

corresponding negative sentence (119c) the negative comparative compares the degree of absence of the same property in two individuals. This is normative, in view of the fact that absence is absolute and has no degree. It is therefore pragmatically bizarre to undertake such a comparison. Similarly, (120) is pragmatically odd, because the number of stories that 'didn't used to be' is infinite, whereas specifically designating a story that 'used to be' constitutes the COUNTER-NORM. We will not go into the details of how such an expression can be perfectly acceptable in certain contexts of previous utterances immediately preceding it. For the present purpose, however, it is sufficient to note Givon's contention that bizarreness in sentences such as those given above in which negatives have been embedded in inappropriate contexts, is primarily due to pragmatic restrictions on the distribution of NEG.

(c) Givon's third claim is that the "...pragmatics of negation as a speech act in language springs from a deeper ontological source, namely from perceptual-conceptual strategies, involving the interplay of figure and ground via which human beings attempt to construe their universe." (1978:70)

In his opinion, the norm in the state of the universe is inertia. A change constituting a break in

the norm, is the positive pole, the figure, while the absence of change is the negative pole, the ground. Perceptually, the positive pole or the presence of the property is the more prominent pole of antonymic property and is unmarked. The less prominent antonym designating the absence of the property is marked. According to Givon, the pragmatics of negation has its basis on this perceptual conceptual source of human communication system (Givon 1978:103-108).

Thus, Givon demonstrates one distinct line of approach to negation, from a pragmatic viewpoint.

4.6: Conclusion

In brief, this review shows how the theory of negation has undergone three radical shifts in linguistic analyses since Klima, concurrently with the increasingly semantically oriented bias in linguistic theory. From a purely syntactic approach of Klima, we move to a semantically based approach of the Generative semanticists. The Generative Semanticists offered hypotheses postulating the deep structure semantic level and the Higher Predicate Analysis, using evidence based on the interaction of negation with quantifiers and adverbs as support for some of their crucial arguments in the theoretical controversy that ensued in the late

1960s. Jackendoff's interpretive theory of negation is a radically different approach introducing semantic interpretive rules on the surface structure. The latest emphasis on pragmatics and discourse analysis of negation marks a new trend in linguistic research.

Notes on Chapter Four

¹Otto Jesperson's seminal study on negation (1917), "Negation in English and other Languages," is an outstanding exception.

²These three concepts are very important in any discussion of negation. Klima's notion of "in construction with" is explained in section 4.1.2. The notion of "command" as introduced by Langacker can be defined as follows:

A node X "commands" another node Y, if (a) X does not dominate Y; (b) Y does not dominate X; (c) X is in structure S ; and (d) node S dominates Y

The concept of "in dominant construction with" is suggested and defined by G. Kallgren (1976) as follows:

"A constituent is in DOMINANT CONSTRUCTION with every constituent being in construction with C without C being in construction with that constituent." (1976:105)

³Klima's brief treatment of Multiple Negation and the inadequacies therein are discussed together in Section 4.1.5.3. below.

CHAPTER FIVE

THE SYNTAX OF NEGATION

5.0: Introduction

In this chapter, I intend to approach the syntax of negation in Newari with two objectives in mind. First, I present a comprehensive exploratory description of how negation (NEG) operates in this language syntactically. I examine the distributional properties of NEG within the verb complex and in different syntactic environments, observing its interaction with related linguistic phenomena such as emphatics, interrogatives, conditionals, relative clauses etc., to the extent that they reveal grammatical peculiarities common also to the negative. Syntactic constraints on the occurrences of NEG and other elements in relation to each other are also investigated.

Second, I claim and demonstrate that abstract underlying structures remote from surface structures are

not necessary for attaining descriptive adequacy for negation in Newari. Only one level of syntactic representation is required to account for the data. I argue that many of those syntactic relationships with reference to negation, which are captured in transformational grammar through derivations such as Neg-Incorporation (Klima 1964), Neg-Raising (Lakoff 1969, Horn 1971), Higher-Verb Analysis (McCawley 1973, Lakoff 1970) etc., are either irrelevant to Newari data or can be accounted for in terms of "command" relationships, "binding" rules, and phrase structure filters (PSF) within the RG framework. Syntactic transformations are eliminated, thereby justifying the basic contention of RG Grammar that "descriptive (and explanatory) adequacy can be achieved in generative grammars without appeal to a formal level of deep structure related to a distinct formal level of surface structure by a set of formal syntactic transformations" (Binkert 1984: 161).

I focus on three major areas of negation in this context: negative polarity, multiple negation and the scope of negation.

5.1: Major Distinctions between maI and maII

Two types of negative formation patterns may be distinguished in Newari: (i) negatives formed by a verbal modifier prefix ma-, similar to not in English, generally denoting sentential or constituent negation (henceforth called maI); (ii) lexical negatives formed by a variety of prefixes such as ma-, a-, nir- etc., and suffixes such as -hin, attached to adjectives and derived adverbs (henceforth called maII). These perform functions similar to that of negative prefixes such as un-, dis-, in- etc. in English.

First of all, in terms of surface syntactic positions maI and maII are clearly distinct in the types of constituents to which they can be attached, as shown by circled nodes in diagram (5) below. Neg maI is prefixed only to verbs, i.e., [-Adjunct]; while maII is affixed to adjectives and adverbs, i.e. [+Adjunct]. Examples (1-4) below illustrate the basic surface positions occupied by maI and maII in simple sentences:

(1) maI- verb:

Pulisā manu-yāta ma-jo-na/ma-jō

police-erg man-dat neg-catch-p/3

'The police did not catch the man.'

(2) maII-adj:

Pulisā ma-bhi-mha manu-yāta jō-na

police-erg neg-good-clf man-dat catch-p/3

'The police caught the bad man.'

(3) maII-adv:

Pulisā manu-yāta ma-khāka jo-na

police-erg man-dat neg-seehave catch-p/3

'The police caught the bad man without
anyone seeing it.'

(4) maI & maII:

Pulisā ma-bhi-mha manu-yāta ma-khāka

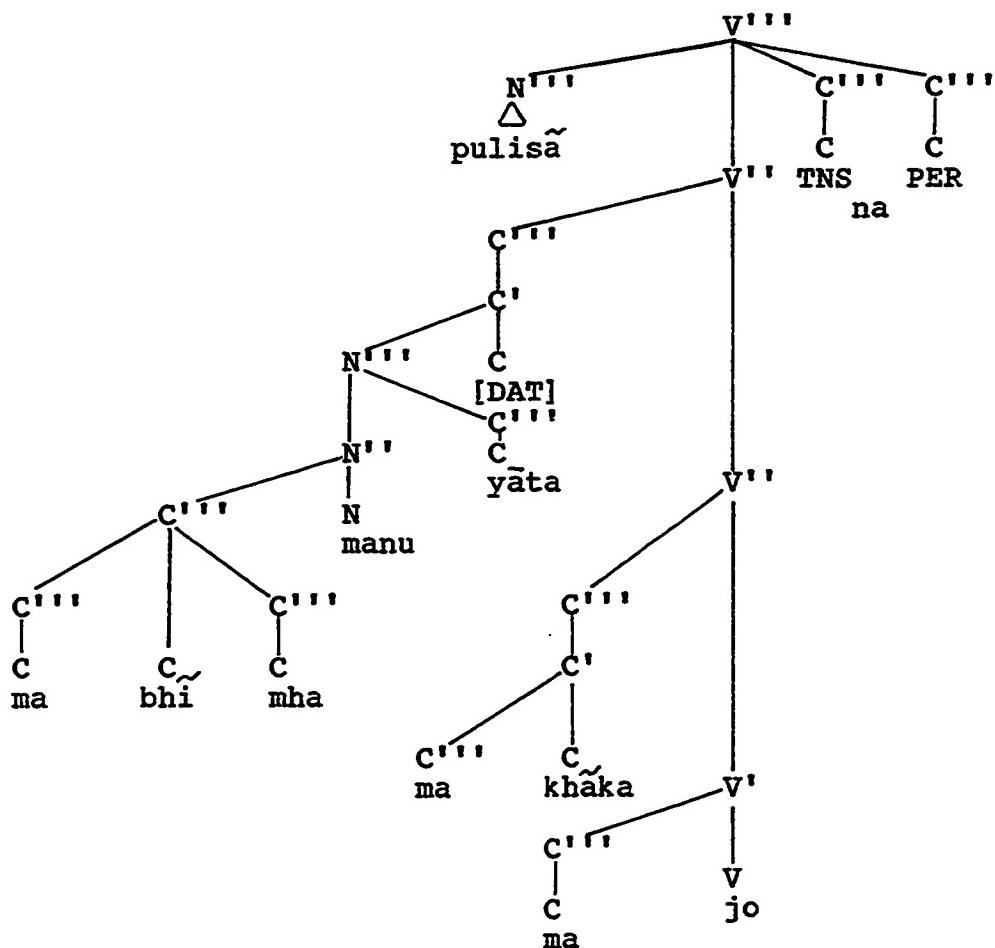
police-erg neg-good-clf man-dat neg-see-have

ma-jo-na

neg-catch-p/3

'The police did not catch the bad man without
anyone seeing it.'

Diagram (5) captures the structure for example (4):



Unlike the negative element not in English, as extensively explored by Klima (1964), the negative morpheme mai does not enjoy a great deal of latitude in its ultimate position and form in Newari. It is a bound affix restricted to occur only within the verb complex

prefixed to the sentence-final finite verb or auxiliary. It is also possible for mal to occur in both the main verb and the auxiliary in the same sentence simultaneously occasioning multiple negation. Observe the following pairs of negative sentences and their affirmative counterparts. Sentence (8c) is an example of multiple negation.

- (6) (a) Ji-∅ nhinhi pasal-e wa-nā
I-abs daily shop-loc go-p/l
'I go to the shop daily.'
- (b) Ji-∅ nhinhi pasal-e ma-wa-nā
I-abs daily shop-loc neg-go-p/l
'I do not go to the shop daily.'
- (7) (a) Rām-ā thwa khāpā-∅ khane fu
Ram-erg this door-abs open can-p/im
'Ram can open this door.'
- (b) Rām-ā thwa khāpā-∅ khane ma-fu
Ram-erg this door-abs open neg-can-p/im
'Ram can not open this door.'
- (8) (a) Chā̄ thwa wāsa ne jyu
you-erg this medicine eat should/p/im
'You should eat this medicine.'
'It is alright for you to eat this
medicine.'

- (b) Chā̄ thwa wā̄sa ne ma-jyu
 You-erg this medicine eat neg-should
 'You should not eat this medicine.'
- (c) Chā̄ thwa wā̄sa ma-ne ma-jyu
 You-erg this medicine neg-eat neg-should
 'You should not not eat this medicine.'

On the other hand, *maII* may occur within two constituents of the sentence at the surface level: (i) within the adverbial phrase, affixed to the adverb, and (ii) within the noun phrase, affixed to the adjective. These *maII* affixes may occur either as prefixes or as infixes, as shown in examples (9-12):

- (9) Ritā̄ ma-bhī-mha machā̄-yā̄ta dā̄-la
 Rita-erg neg-good-clf child-dat beat-p/3
 'Rita beat the bad/naughty child.'
- (10) ne-ma-khā̄-mha phogī-nā̄ dhebā̄-Ø khu-la
 eat-neg-see-clf beggar-erg money-abs steal-p/3
 'The hungry beggar stole the money.'
- (11) mwā̄-gu jyā̄-Ø yā̄ mate
 neg-necessary-clf work-abs do neg-impv
 'Don't do unnecessary work.'
- (12) Jī̄ ma-khu-gu khā̄ gablē ma-lhā̄-nā̄
 I-erg neg-true-clf talk-abs never neg-talk-p/l
 'I never speak the untruth.'

Examples (9-12) illustrate how adjectival phrases are

negated in Newari. Adverbial phrases too appear to take *maiII* both as prefixes as well as infixes. Observe sentences (13) and (14):

(13) *wā nhýáble ma-thuika khā kan-i*
 he-erg always neg-clearly talk-abs relate-f/3

'He always relates thing unclearly.'

(14) *machā si-ma-daka anā bisyu wan-a*
 child-abs know-neg-have there-elt run go-p/3
 'The child ran away from there without anyone
 knowing it (quietly)'.

It is important to point out here that all verbs can take the verbal modifier prefix *mai*, whereas not all categories of adjectives and adverbs can be negated with the *maiII* affix.

Furthermore, *mai* and *maiII* also demonstrate certain dissimilar syntactic properties and are independent of each other in relation to their interaction with other elements in the sentence structure. For example, negative polarity words such as *gable* 'never', *gana* 'nowhere', and *sunānā* 'nobody' (erg), (whose nasal suffix distinguishes them from the question words *gable* 'when', *gana* 'where', and *suna* 'who,') must co-occur with *mai*. In the following examples, the (a) sentences contain the question words with *mai*; the (b) sentences, the questions words without

mai; the (c) sentences, the corresponding negatives with
 mai; and, the (d) sentences, all of which are
 ungrammatical, the negatives without mai.

- (15) (a) Sítā gable bhi̤-gu jyā-∅ ma-yā?
 Sita-erg when good-clf work-abs neg-do-p/3
 'When didn't Sita do good work?
 (b) Sítā gable bhi̤-gu jyā-∅ yā-ta?
 Sita-erg when good-clf work-abs do-p/3
 'When did Sita do good work?
 (c) Sítā gablē bhi̤-gu jyā-∅ ma-yā
 Sita-erg never good-clf work-abs neg-do-p/3
 'Sita never not does good work.'
 (d) *Sítā gablē bhi̤-gu jyā-∅ ya.
 Sita-erg never good-clf work-abs do-p/3
 'Sita never does good work.'
- (16) (a) Ji-∅ gana ma-wan-ā?
 I-abs where neg-go-p/l
 'Where didn't I go?'
 (b) Ji-∅ gana wa-nā?
 I-abs where go-p/l
 'Where did I go?'
 (c) Ji-∅ ganānā ma-wan-ā
 I-abs nowhere neg-go-p/l
 'I not go nowhere.'

- (d) *Ji-Ø ganānā wan-ā
 I-abs nowhere go-p/l
 'I go nowhere.'
- (17) (a) Sunā ũ me-Ø ma-hā-la?
 Who song-abs neg-sing-p/3
 'Who wasn't singing a song?'
- (b) Sunā ũ me-Ø hā-la?
 Who song-abs sing-p/3
 'Who sang a song?'
- (c) Sunā-nā ũ me-Ø ma-hā-la
 noone-erg song-abs neg-sing-p/3
 'No one not sang a song.'
- (d) Sunā-nā ũ me-Ø hā-la
 noone-erg song-abs sing-p/3
 'No one sang a song.'

MaII on the other hand, can occur in both negative and affirmative sentences. The presence of maII does not demand mai in the verb. But maII cannot co-occur with the negative polarity items, unless mai is also present in the sentence, thus occasioning multiple negation. Observe the following examples:

- (18) (a) Rām-Ø jāch-e a-safal ju-la
 Ram-abs test-loc neg-successful become-p/3
 'Ram became unsuccessful in the test.'

- (b) Rām-Ø jāch-e a-safal
 Ram-abs test-loc neg-successful
 ma-ju-la
 neg-become-p/3
 'Ram did not become unsuccessful in
 the test.'
- (c) Rām-Ø jāch-e gable a-safal
 Ram-abs test-loc never neg-successful
 ma-ju:
 neg-become-p/3
 'Ram never not becomes unsuccessful in
 the test.'
- (d) *Rām-Ø jāch-e gable a-safal
 Ram-abs test-loc never neg-successful
 ju-la
 become-p/3
 'Ram never becomes unsuccessful in
 the test.'

In summary, the crucial syntactic difference between maI and maII stems directly from the fact that maII only negates the item to which it is immediately affixed, while maI motivates either sentential or constituent negation, depending on whether the entire sentence or a single constituent falls within its wide or narrow scope. For example, in (18b), maI can have as

its target the whole sentence or any of the other constituents with appropriate intonational additions, but the maII prefix a- only negates the lexical item safal. A detailed discussion of the scope of maI, and the methods of determining the scope of NEG will be provided in later discussions. It is sufficient here to indicate that maII represents only lexical negation as distinct from maI which may operate as sentential or constituent negation.

5.2: MaI and the Verb Complex

Since maI is invariably attached to a verbal element in the sentence, an understanding of the verb complex in Newari is germane to an analysis of negation. Therefore, in this section, four fundamental features of the verbal system are examined prior to a discussion of maI, namely, (a) the synthesis of tense and person markers, (b) the order of elements within the verb complex, and the cooccurrence constraints, (c) suffix constraints within the auxiliary, and (d) the determination of various levels in which the different elements of the verb occur within a simple sentence. After providing detailed specifications of the constituent structure of the verb complex, I shall proceed to investigate the occurrences of maI within a

simple sentence in relation to the principal elements within the verb and the auxiliary.

5.2.1: Tense and Person

Consider the following sentences which demonstrate two interesting characteristics of the Newari verbal system (see Section 2.4.1.4): (i) the morphological markers for tense and person differ across distinct classes of verbs so that one must know the verb root in order to predict the tense/person forms necessary for proper conjugations; and (ii) the tense and person markers are fused into a single suffix.

- (19) (a) *Jí jā-Ø thu-yā*
 I-erg rice-abs cook-p/l
 'I cooked rice.'
- (b) *Jí jyā-Ø yā-na*
 I-erg work-abs do-p/l
 'I did the work.'
- (c) *Ji-Ø ché wan-ā*
 I-abs home-loc go-p/l
 'I went home.'

Note that in the examples above the verbal suffixes are yā, nā, and a for the verbs thu 'to cook', yā 'to do', and wan 'to go' respectively. These suffixes serve an identical function of representing

first person, non-future tense, but the actual form of the morphological markers depend on the final consonant in the verbal root¹. This feature of the Newari verb is very important because, as I will demonstrate later, the participial forms of the verb and the suffix constraints on the different elements of the auxiliary follow this general pattern too.

However, although the tense and person markers follow a clearly consistent pattern in the non-future tenses, they do not follow such a pattern in the future tense. The distinctions in the first person future tense are illustrated below (cf. (19)).

- (20) (a) \tilde{Ji} $jā-\emptyset$ $thu-i$
I-erg rice-abs cook-np/l
'I will cook rice.'
- (b) \tilde{Ji} $jyā$ $yā-e$
I-erg work do-np/l
'I will do the work.'
- (c) $Ji-\emptyset$ $chē$ $wan-e$
I-abs home-loc go-np/l
'I will go home.'

Thus, the verbs yā and wan take the same suffix in the future tense, while in the non-future tense the morphological markers for these verbs are different as shown in (19).

Only two sets of person markers are present: one for the first person, and the other for the second and third persons combined. Consider these:

- (21) (a) *Jí safu-Ø nyā-na*
 I-erg book-abs buy-p/l
 'I bought a book.'
- (b) *Chá safu-Ø nyā-ta*
 You-erg book-abs buy-p/2
 'You bought a book.'
- (c) *wá safu-Ø nyā-ta*
 He-erg book-abs buy-p/3
 'He bought a book.'
- (22) (a) *Jí safu-Ø nyā-e*
 I-erg book-abs buy-np/l
 'I will buy a book.'
- (b) *Chá safu-Ø nyā-i*
 You book-abs buy-np/2
 'You will byu a book.'
- (c) *wá safu-Ø nyā-i*
 He-erg book-abs buy-np/3
 'He will byu a book.'

In (21), we see that in the non-future tense, the first person is marked differently, and the second and the third persons are marked similarly. In the future tense, an identical distinction is made between the first and

the other persons. On the basis of this evidence, we conclude that there are only first person and non-first person markers in this language.

Furthermore, verbs are not marked for number either. See sentences (23a) and (23b) and compare them with examples (20c) and (21c) respectively.

- (23) (a) Ji-pi̐ chē̐ wan-ā̐
 I-pl-erg home-loc go-p/l
 'We went home.'
 (b) Imi-sā̐ safu-∅ nyā̐-i
 they-erg book-abs buy-np/3

Our discussion so far has shown that Newari verb is marked for two tenses and two persons. However, there seems to be no motivation for separating the tense from the person marker in the verb. As is clearly evident from the examples presented above, they are fused into a single suffix. In the examination of the constituent structure of Newari in chapter three, I have adhered to the traditional distinction between tense and person and shown them as dominated by two separate characterizer nodes. Henceforth, I consider them to be a single suffix, and will present it as dominated by one characterizer.

A summary chart below shows the tense/person

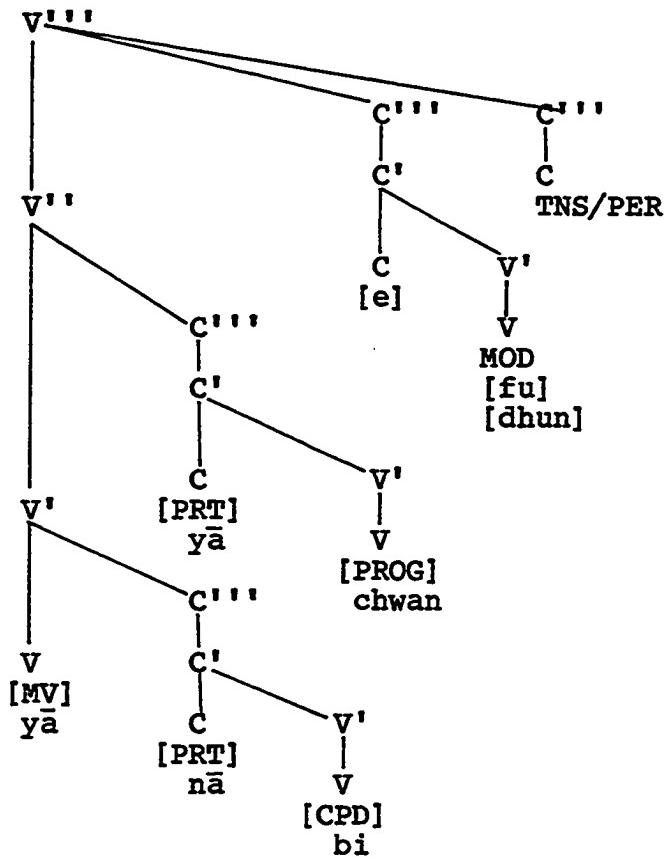
fusions in three verbs - thuye 'to cook', yae 'to do', wane 'to go':

(24)	p/l	thu-yā	yā-nā	wan-ā
	np/l	thu-i	yā-e	wan-e
	p/3	thu-la	yā-ta	wan-a
	np/3	thu-i	yā-i	wan-i

5.2.2: Verb and Auxiliary

The verb complex is composed of the main verb, the compound verb, the progressive auxiliary chwan, and the modal. The order of elements in Newari verb complex is [MV] [CPD] [PROG] [MOD] [TNS/PER]. Each of these verbal elements except the final one carry participle suffixes [PRT] when they occur in a sequence (See section 5.2.3). Note the following diagram, in which I have shown the syntactic position of the main verb, and the order of elements within the auxiliary.

(25)



$[MV]$	MAIN VERB
$[MOD]$	MODAL
$[PRT]$	PARTICIPLE
$[PROG]$	PROGRESSIVE
$[CPD]$	COMPOUND

The following sentences variously realize the structure (25).

- (26) (a) Rāmā jyā-Ø yā-ta
 Ram-erg work-abs do-p/3
 'Ram worked.' ([MV] [TNS/PER])
- (b) Rāmā jyā-Ø yā-nā bi-la
 Ram-erg work-abs do-prt ben-p/3
 'Ram worked (for someone).' ([MV] [PRT]
 [CPD] [TNS/PER])
- (c) Rāmā jyā-Ø yā-nā bi-yā chwan-a
 Ram-erg work-abs do-prt ben-prt prog-p/3
 'Ram-erg is working (for someone).'
 ([MV] [PRT] [CPD] [PRT] [PROG] [TNS/PER])
- (d) Rāmā jyā-Ø yā-na bi-yā chwane
 Ram-erg work-abs do-prt ben-prt prog-prt
 fu
 can-p/impr
 'Ram can be working (for someone).'
 ([MV] [PRT] [CPD] [PRT] [PROG] [PRT]
 [MOD] [TNS/PER])

First of all, the compound verb consists of the main verb and an auxiliary verb traditionally called the operator. It is important to point out here that these operators also function as main verbs in simple sentences, and that their role in compound verbs is quite distinct from their roles as main verbs. There is only a small class of these operators which function productively in the language. I provide two examples below to illustrate that the main verb and the operator form a syntactic unit, and that nothing can intervene between elements of a compound. The only exception to this rule is the occurrence of *mai*, to which I shall return at a later point in the discussion.

- (27) (a) *Rāmā̄ yā-nā̄ jyā-∅ bi-la
 Ram-erg do-prt work-abs ben-p/3
 'Ram worked (for someone).'

- (b) *Rām-∅ chhwa-la chē̄ wan-ā̄
 Ram-abs right away-p/3 home-loc go-prt
 'Ram went home right away.'

Note that it is the operator which is marked for tense/person. We can generalize this and say that, in the Newari verbal system the rightmost V' node dominating the last element in the sequence of the

auxiliary always carries the tense/person marker. This is immediately expressible in (25).

Next, I examine the cooccurrence constraints which operate within the auxiliary to corroborate the claim that there is only one aspect form in Newari, namely, the progressive aspect chwan which functions in a manner similar to the progressive -ing in English, and argue that dhun 'to finish' which has been traditionally designated as the perfective aspect equivalent to -en in English demonstrates syntactic behavior similar to that of the modal rather than to the other aspect form. Consider the sentences given below:

- (28) (a) Rāmā jyā-∅ yā-nā chwan-e fu
 Ram-erg work-abs do-prt prog-prt can-p/∅
 'Ram can be working.'
- (b) Rāmā jyā-∅ yā-nā chwan-e
 Ram-erg work-abs do-prt prog-prt
 dhūka-la
 finish-p/3
 Ram has finished working.'
- (c) *Rāmā jyā-∅ yā-nā dhūk-e fu
 Ram-erg work-abs do-prt finish-prt can-p/∅
 'Ram could have finished working.'

(d) *Rāmā jyā-Ø yā-nā chwan-a
 Ram-erg work-abs do-prt prog-prt
 dhūk-e fu
 finish-prt can-p/Ø

'Ram could have finished working.'

It is clear from the ungrammatical sentences
 (28c) and (28d) that dhun can not cooccur with fu.
 They are in complementary distribution within the auxiliary. In order to express the idea in a sentence like (28c), one must use embedding as in (29):

(29) Rāmā jyā-Ø yā-nā chwan-e
 Ram-erg work-abs do-prt prog-prt
 dhuka-la ju-i
 finish-p/3 possible-np/3

'It is possible that Ram could have
 finished working.'

Furthermore, if one examines the following short form answers to questions, it is evident that dhun falls in the same category as the modal fu:

- (30) (a) Chā jyā-Ø yā-e dhun-a lā?
 You-erg work-abs do-prt finish-p/2 Q
 'Have you finished working?'
- (b) Dhun-a
 finish-p/1
 'Yes! (I have finished)'

(31) (a) Chā jyā-Ø yā-e fu la?

You-erg work-abs do-prt can-p/Ø Q

'Can you do the work?'

(b) Fu

can-p/Ø

'Yes!(I can).'

(32) (a) Chā jyā-Ø yā-na chwan-ā la?

You-erg work-abs do-prt prog-p/2 Q

'Are you working?'

(b) *Chwan-ā

'Yes!(I am working.)'

(c) Yā-nā chwan-ā

do-prt prog-p/l

'Yes!(I am working.).'

As shown in sentences (30) and (32), dhun, and fu can occur as answers to questions, but the correct form of answering a question such as (32a) is the use of the full verb complex yā-nā chwan-ā (32c). This makes it obvious that the progressive aspect chwan behaves differently from dhun, and fu and that the latter two behave identically in these respects. On the basis of this evidence I conclude that dhun is a modal on the same level as fu.

Thus, this analysis of the distribution of the various elements of the auxiliary has revealed that

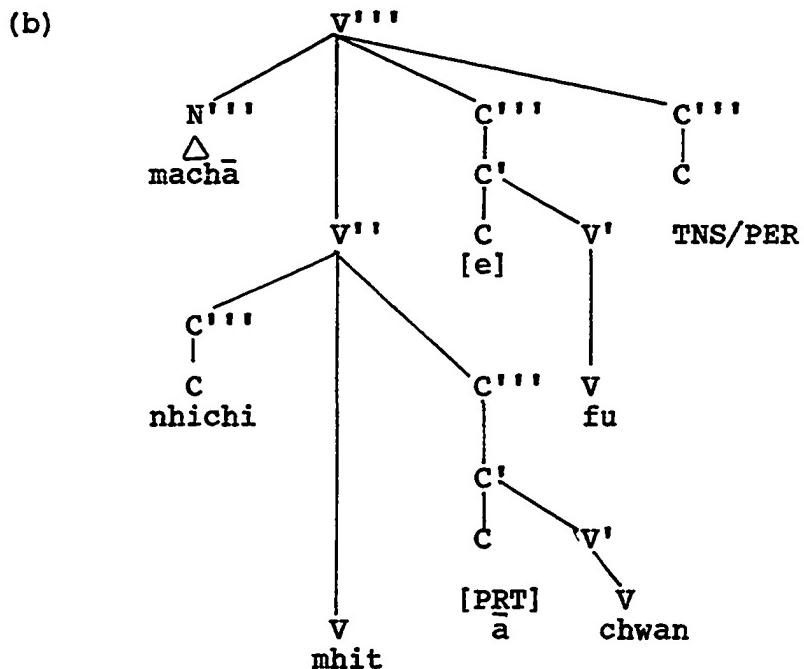
these members which make a verb in Newari do not behave in the same way. The RG theory holds that these differences in syntactic behavior are not simply idiosyncracies of the particular members, but that they stem from structural differences. Having established the significant facts that the syntactic behavior of modal is different from that of the progressive aspect, and that the main verb with the operator forms a syntactically inseparable unit, I proceed to analyze the verb complex in terms of the hierarchical levels proposed in RG. But prior to that it is necessary to explore an intricate system of participial suffixes that characterize the auxiliary in Newari, and in many ways reflect the participial system in English but in reverse order.

5.2.3: Hierarchical Levels of the Verbal Complex

Let us examine the diagram given in (25) of the hierarchical levels of the verb and the auxiliary. Observe that on each of the levels in which V' is directly dominated by C''', the head of the construction is a participle. A significant discovery in this connection is that the participle head of one level attaches itself to the V' auxiliary dominated by a level lower than itself. For example, the [e] participle on

V'''' level directly dominated by C''' occurs as a suffix to the progressive chwan on V'' level; and the [PRT] participle head on V'' level directly dominated by C''' is attached to the compound verb operator on V' level. Following this pattern consistently, the head participle [PRT] on V' level occurs as a suffix on the main verb. Consider the sentence below and the diagram accompanying it.

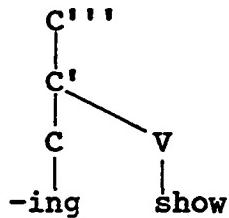
- (33) (a) Machā-Ø nhichi mhit-ā chwan-e fu
 child-abs all day play-prt prog-prt can-p/Ø
 'The child can play all day.'



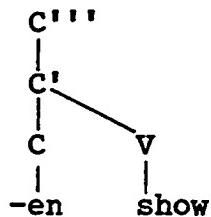
as [PRT], attaches to the main verb mhi, and the other participle shown as [e] occurs as a suffix to the progressive chwan. As stated earlier in section 5.2.1, different verbs depending on the morphological classification of the verb classes take different suffixes. Similarly, the participle suffixes differ from one individual verb to another. [PRT], therefore, is a representative symbol for a variety of morphological markers. On the other hand, the participle [e] attaches itself to any verb preceding the modals.

A very interesting parallel on the reverse is observed here in comparison to English. Within RG (Binkert, Chapter Four, and (forthcoming a)) the present participle -ing, and the past participle -en have structures like (34):

(34) (a)



(b)



In English the participle head is suffixed to

the verb immediately following it as shown above, whereas in Newari, the participle head affixes to the preceding verb on the lower level. This is predictable because Newari is a verb final language and the order of elements is reversed.

Now we can turn our attention to the question of the justification of levels on which the different elements of the verb complex occur. Notice that the preceding examples and the diagrams accompanying them are set up on the assumption that there are three levels of verbal constituents. One can find evidence internal to V''' as well as independent motivation to support this assumption. First and foremost, we can draw on the evidence from occurrences of omissions of the V'' level constituents in a conjunct sentence. Observe in the following examples that it is possible to omit the V'' level constituents.

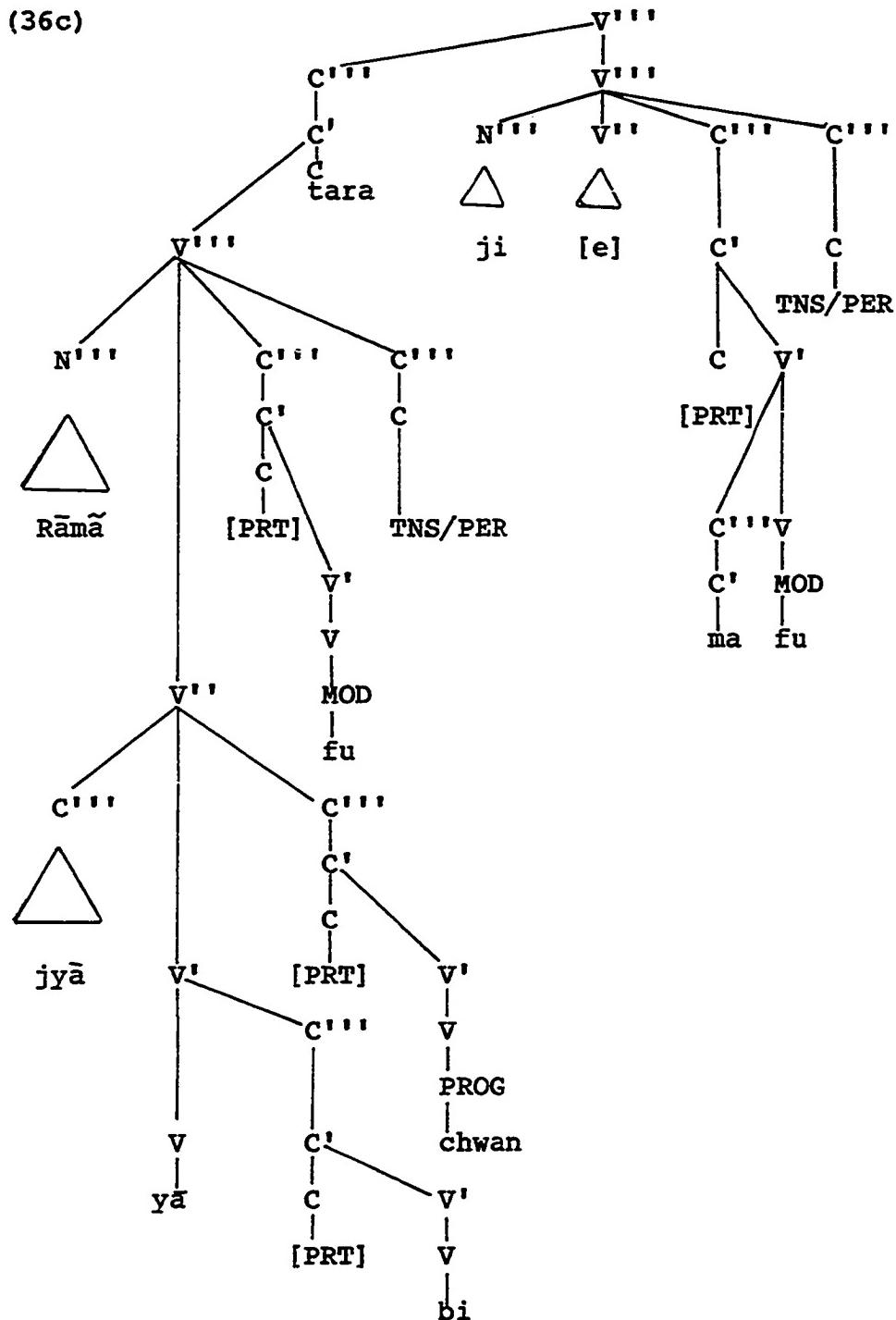
- (36) (a) Rāmā jyā-Ø yā-nā bi-yā chwan-e
 Ram-erg work-abs do-prog ben-prt prog-prt
 fu tara ji ma-fu
 can but I-erg neg-can.

'Ram can be working (for someone),
 but I can't.'

(b) Rāmā̄ machā-yāta dā-e fu tara
 Ram-erg child-dat beat-prt can-p/∅ but
 jī̄ athe yā-e ma-fu
 I-erg so do-prt neg-can-p/∅
 'Ram can beat the child but I can not
 do so.'

In (36a), the entire V'' level together with the V' level constituents are omitted. In (36b), the sentential pronominal athe refers to the V'' level and the V' level constituents machā-yāta dā-e. Observe that the modal fu in both examples can not be omitted. See diagram (36c) below for example (36a). This indicates that the modal must be established on a different level from the V'' and V' levels. The only possible level that can be assumed for the modal is the V''' level.

(36c)



Further examples below demonstrate that ungrammatical sentences are produced if the constituents from the V' level are omitted, regardless of where *mai* occurs.

- (37) (a) *Rāmā jyā-Ø yā-nā bi-yā chwan-e fu,
 tara jī ma-chwan-e fu.
 *Rāmā jyā-Ø yā-nā bi-yā chwan-e fu,
 tara ji chwan-e ma-fu.
 'Ram can be working, but I can't be.'
- (b) *Rāmā jyā-Ø yā-nā bi-yā chwan-e fu,
 tara ji ma-bi-ya chwan-e fu.
 *Rāmā jyā-Ø yā-nā bi-yā chwan-e fu,
 tara ji bi-yā ma-chwan-e fu.
 *Rāmā jyā-o yā-nā bi-yā chwan-e fu,
 tara ji bi-yā chwan-e ma-fu.
 'Ram can be working but I can't be.'

This evidence helps us to draw a distinction between V'' and V' levels. No V' level constituent can be omitted individually unless the V'' level is also omitted.

An examination of the noun phrase in this connection presents additional evidence to support the separation of the levels in the phrasal hierarchy. An important cross category generalization can be captured at this point, namely, that in Newari only X'' level

constituents can be omitted entirely, and that the X' level constituents can be omitted only if the X'' level is also omitted simultaneously with it. Consider the following sentences which show that omissions from N'' level do not result in ungrammatical sentences but the omissions from N' level produce ungrammatical sentences.

- (38) (a) Ram-yā bhi-gu safu-Ø thana du,
 Ram-gen good-clf book-abs here is,
 tara ji-gu ma-du.
 but I-gen neg-is.
 'Ram's good book is here, but mine isn't.'
- (b) *Rām-yā nhu-gu itihas-yā safu-Ø
 Ram-gen new-clf history-gen book-abs
 thana du, tara ji-gu pulan-gu ma-du.
 here is, but I-gen old-clf neg-is.
 *'Ram's new history book is here,
 but my old isn't.'
- (c)* Rām-yā itihas-yā safu-Ø thana du,
 Ram-gen history-gen book-abs here is,
 tara ji-gu hisab-ya ma-da.
 but I-gen math-gen neg-is.
 *'Ram's history book is here, but my
 math isn't.'

In sentence (38a), N'' has been omitted in the conjoined sentence, and it is perfectly grammatical, but

in sentences (38b) and (38c), the omissions of N' and N levels with retention of N'' level constituents have produced ungrammatical sentences. This indicates that whereas it is possible to omit N'' level and all nodes below N'', it is not possible to omit levels N' and N level constituents while retaining N'' level constituents.

Next, I will argue that V' level is distinct from V'' level. Consider the following sentence (39), in which the compound verb alone is omitted from the conjunct.

- (39) Rāmā mari-Ø wa Sītā lā-Ø
 Ram-erg bread-abs and Sita-erg meat-abs
 ha-yā bi
 bring-prt ben-p/l

'Ram will bring bread and Sita meat.'

We can now establish compound verb on V' level, with the main verb as the head.

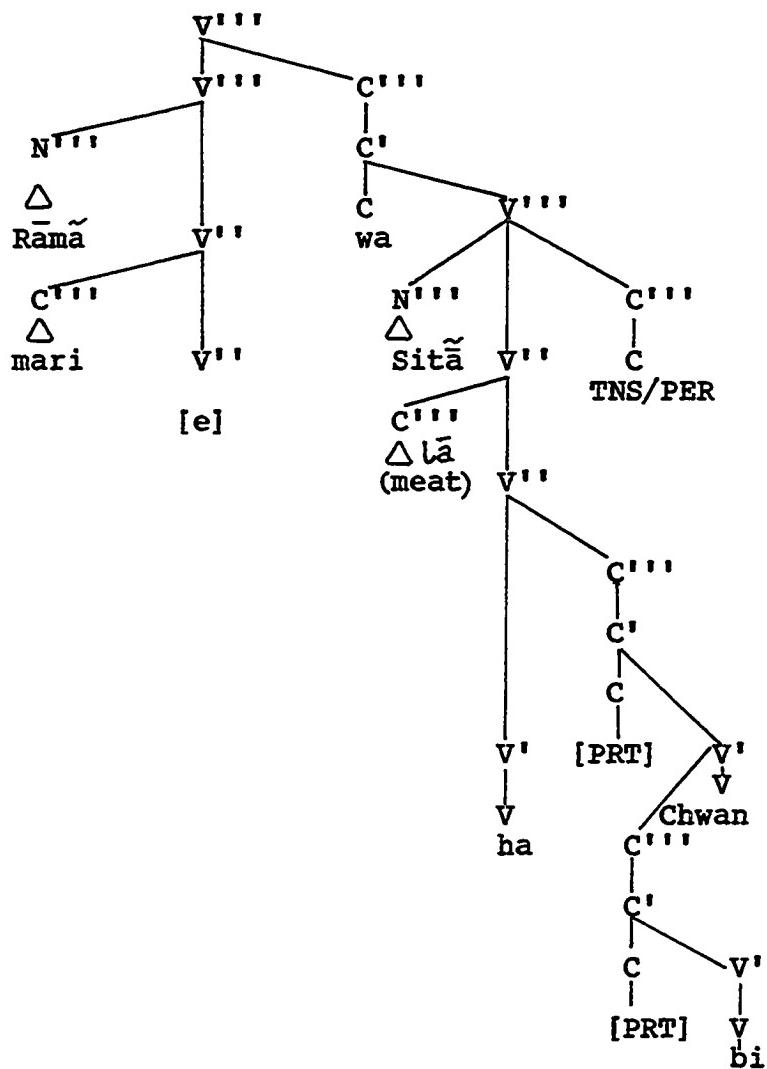
The recursive feature of RG can also be exemplified here. This mechanism in RG facilitates expression of constituents occurring on recursive nodes of the same level. For example, consider sentence (40):

(40) Rāmā mari-∅ wa Sītā[~] lā-∅
 Ram-erg bread-abs and Sita-erg meat-abs
 ha-yā bi-yā chwan-i
 bring-prt ben-prt prog-np/3

'Ram and Sita will keep bringing meat and bread.

The V'' level constituents are mari, lā, and the progressive aspect chwan. But note that in the conjunct only the progressive aspect, the V' level and V constituents are omitted. mari, and lā are retained in the conjuncts. This provides evidence that there must be recursion of V'' level nodes, to account for the omission of the progressive and the retention of the other constituents. Diagram (41) shows the structure of sentence (40):

(41)



It is one of the virtues of the RG framework that this interesting linguistic fact is captured by separating the levels in terms of a three level hierarchy, and allowing recursion of the same node as stated in rule (27) in chapter three earlier. To conclude, on the basis of the evidence presented above one can establish that the verb complex in Newari can be accurately and adequately analyzed in terms of the three levels discussed: the modal in the V''' level, the progressive chwan in the V'' level and the compound verb in the V' level with the main verb as the head of the construction. In the following section, I will show how this kind of analysis has made possible a highly economical and simple statement of the NEG rule in Newari.

5.3: The Syntactic Distribution of maI

In the context of the detailed specifications of the verb complex arrived at within the RG framework, let us examine the syntactic distribution of maI in more rigorous details. It has been stated in the preceding sections that maI occurs prefixed to the rightmost V' node in the verbal sequence, but a study of the following examples show that this statement needs to be

revised in the light of the analysis presented in
Section 5.2.

First, observe the positions occupied by maI in
the following sentences:

- (42) (a) Ji jā-Ø ne ma-fu
I-erg rice-abs eat-prt neg-can-p/Ø
'I can not eat rice.'
- (b) Ji jā-Ø ma-ne fu
I-erg rice-abs neg-eat-prt can-p/Ø
'I might not eat rice.'
- (c) Ji jā-Ø ma-ne ma-fu
I-erg rice-abs neg-eat-prt neg-can-p/Ø
'I can not, not eat rice.'

The basic structure of these sentences is shown in the
diagram below. Note the positions of maI.

(43)

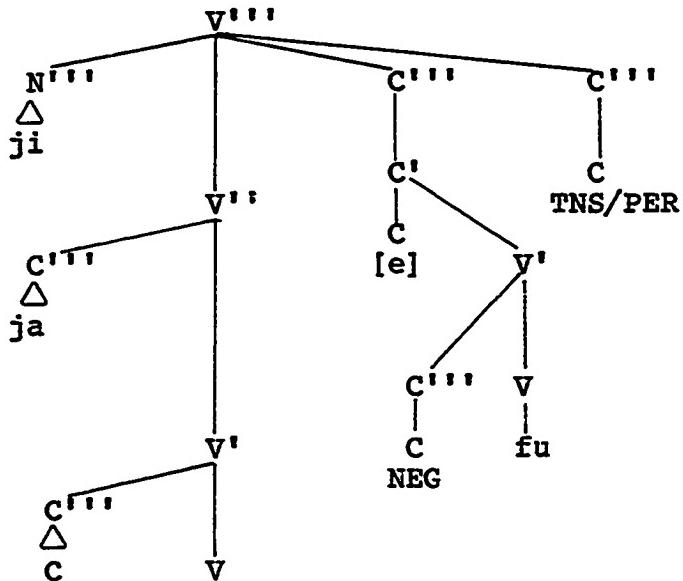


Diagram (43) illustrates three patterns of maI prefixation process: maI occurs prefixed either to the main verb in V' level (38a), or to the modal in V''' level (38b). It can also occur in both positions simultaneously producing an instance of multiple negation.

We now need to revise our earlier position and state that maI can occur prefixed not only to the final verb in the verbal sequence, but also to the non-final main verb when it occurs with a modal. This can be further confirmed with example (44).

- (44) (a) Rama safu-Ø bwan-e ma-dhuku-ni
 Ram-erg book-abs read-prt neg-finish-p/3
 'Ram has not finished reading the book.'

- (b) Rama safu-Ø ma-bwan-e dhuka-la
 Ram-erg book-abs neg-read-prt finish-p/3
 'Ram does not read the book anymore.'
- (c) Rāmā safu-Ø ma-bwan-e ma-dhūku-ni
 Ram-erg book-abs neg-read-prt neg-finish-p/3
 'Ram has not, not read the book.'
- (d) Rāmā safu-Ø ma-bwā-ni
 Ram-erg book-abs neg-read-p/3
 'Ram has not read the book as yet.'

Example (44a) has an alternate form (44d) used more frequently. (44c) though a perfectly grammatical sentence, sounds contrived and uncomfortable. But my point here is that *maI* can occur in these various positions.

However, with the progressive chwan in V'' level, *maI* is constrained in its occurrences. It is not possible to attach *maI* to the main verb when the progressive is present in the sentence. *MaI* can only occur prefixed to the progressive.

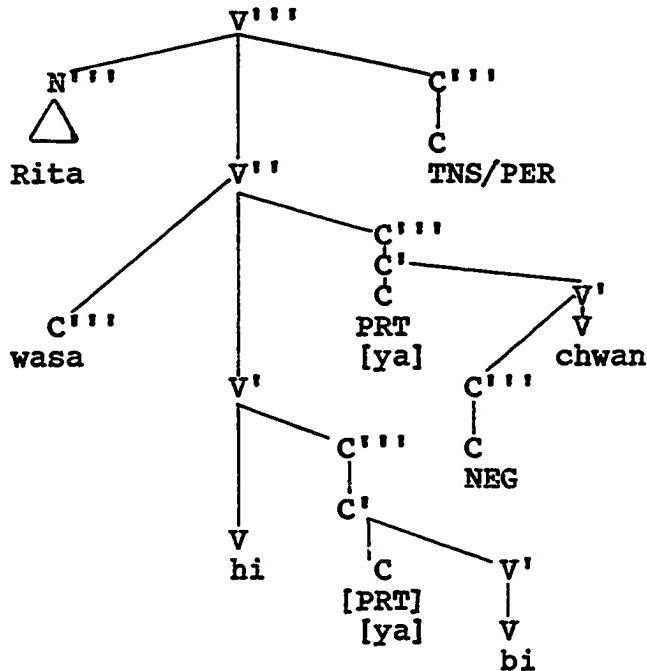
- (45) (a) Jī jyā-Ø yā-nā ma-chwanā
 I-erg work-abs do-prt neg-prog-p/l
 'I am not working.'
- (b) *Jī jyā-Ø ma-yā-nā chwa-nā
 I-erg work-abs neg-do-prt prog-p/l
 'I am not working.'

- (c) *J̄i jyā-∅ ma-yā-nā ma-chwa-nā
 I-erg work-abs neg-do-prt neg-prog-p/l
 'I am not, not working.'

In instances of sentences with a progressive as shown in (40), mal operates under the constraint that it can attach only to the progressive. This restriction is in force in any sentence with a progressive, except when a modal is present in the sentence. In all other structures the restriction holds. See example (46) below and the accompanying diagram (47), specifying the structure for (46a).

- (46) (a) Ritā wasa-∅ hi-yā bi-yā
 Rita-erg clothes-abs wash-prt ben-prt
 ma-chwā
 neg-prog-p/3
 'Rita is not washing clothes
 (for someone).'
 (b) *Ritā wasa-∅ hi-yā ma-bi-yā
 chwā
 'Rita is not washing clothes (for someone).'
 (c) *Ritā wasa-∅ ma-hi-yā ma-bi-yā
 ma-chwā
 'Rita is not, not washing clothes (for
 someone).'

(47)



If only the compound verb is present in the sentence, we find a pattern similar to that mentioned with reference to examples (42) and (44) above. Multiple negation is possible as shown in examples (42c) and (44c).

Another form which allows multiple negation in Newari is the negative imperative marker. te is phonologically realized as the imperative marker only in negative structures. It does not occur alone. Contrary to traditional analyses of Newari, I argue that te is a modal like fu and dhun because it has features similar to the other modals, although it is not completely like them. For example, te requires a

participle [e] in the preceding verb or auxiliary like other modals, and it also permits multiple negation as shown in example (48b).

- (48) (a) Cha-^g kane we ma-te
 You-abs tomorrow come-prt neg-imp
 'You don't come tomorrow!'
- (b) Cha-^Ø kane ma-we ma-te
 You-abs tomorrow neg-come-prt neg-imp
 'Make sure you will come tomorrow.'

A close examination of the occurrences of maI in the diagrams given above will indicate that regardless of which element the negative is prefixed to, maI is a prehead characterizer directly dominated by V' level. This is a generalization made possible by the analysis of verb and the auxiliary in Newari in terms of hierarchical levels. The explicit specification of the constituents within the auxiliary captured by RG framework has helped to clearly define the position of the negative in relation to each element in the verb complex.

Hierarchical levels in terms of X' theory were first introduced by Chomsky (1970), and elaborated by Jackendoff (1977), within the essential framework of the standard theory (Chomsky 1965). This theory soon became known as the extended standard theory because of the

addition of such formal devices as "trace of movement." (See Newmeyer 1980:189-191 for discussion). Although trace theory dates from the early seventies (Chomsky 1973; Wasow 1972), Jackendoff (1977) did not make use of it in his X-bar theory in the maximum way. In early TG, when a category was moved, for example, the NP direct object, it disappeared from its original position and was given a new position. Thus, there was no such thing as a fixed NP position. In trace theory, however, the moved NP leaves behind a trace in its original position. Therefore, a position such as an NP direct object can be referenced after movement. Jackendoff (1977) does not take advantage of this aspect of trace theory.

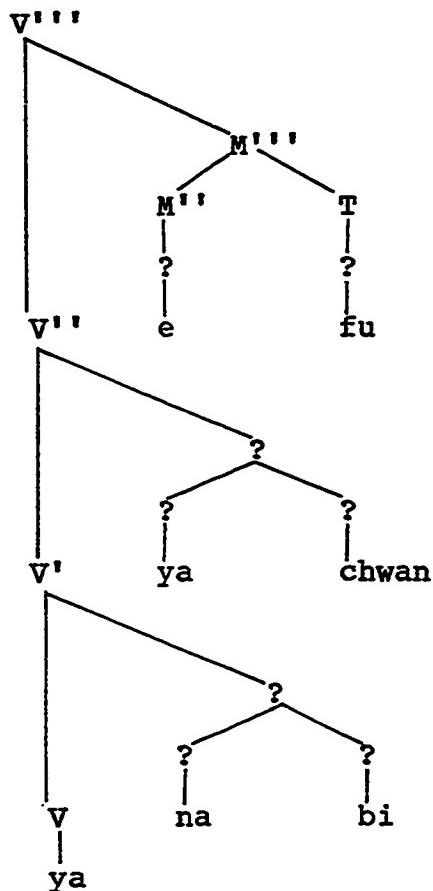
In the RG, there are no movement or deletion rules. Therefore, positions are fixed and there is only one structural level. Because of this, RG has several advantages over TG. First, the RG analysis allows us to distinguish the different functions of the verbal constituents in terms of the different hierarchical structures. We can say, for example, that the modal is a V''' level, posthead characterizer, and so on. Since there are no transformations, in RG, specific positions can carry fixed meanings.

Second, Jackendoff's X-bar theory does not provide any way for analyzing the auxiliary elements, in

particular, for mentioning the verbal status of the auxiliary verb or for generalizing the endings. Consider the diagram (49) in Jackendoff's framework (1977:50). Jackendoff provides no way of determining the labels on the questioned nodes. Furthermore, Jackendoff can not revise his diagrams along the lines of RG without changing his theory in the direction of RG (Binkert 1984:159). RG, in fact, makes the verbal suffix the head of the phrase, allows V' without a dominating V''', has the category characterizer, and so on. Jackendoff's model has none of these features.

Third, TG trees are abstract structures. The element NEG is an abstract constituent which occurs in V''' level S-finally in an SOV language like Newari. So a series of transformational rules have to be specified in order to realize NEG as maI in its various positions. In RG maI is generated directly where it occurs in the sentence structure so that we see immediately the simplicity of its occurrence in all verbal constituents.

(49)



Now, we may formulate the NEG rule in the simplest terms possible. Examining all of the possibilities of verbal structure in Newari, we have succeeded in reducing the NEG rule to a single generalization. As I already stated, mai occurs as a prehead characterizer immediately dominated by V' level. It can be prefixed to any constituent within the verb complex except when the progressive aspect is present. In sentences which have the progressive aspect mai

occurs attached to only the aspect unless a modal is present. When a modal is present with the progressive, either the progressive or the modal or both may take maI as the negative prefix.

At this point, it is necessary to discuss filters as used in RG. Before I state the filters pertaining to negation, first let us see how this mechanism operates within RG, and then express the syntactic and lexical constraints on maI formally by employing labelled brackets of the type used within the framework of RG.

In RG, filters operate in three capacities. First, they express restrictions on the sequences of items in phrase structure; second, they express restrictions on semantic interpretation such as the binding conditions that can exist between anaphors and their antecedents; and third, they express restrictions on the occurrence of lexical items and lexical formatives. In their first function, filters express syntactic constraints and are similar to context sensitive phrase structure rules. Binkert (164-165) describes these filters as "node admissibility conditions in the sense originally suggested by Richard Stanley (see McCawley (1968)."¹⁰ In their second function, RG filters operate like conditions on transformations and are similar to the filters in

Chomsky and Lasnik (1977). In their third function, RG filters check the co-occurrence restrictions between lexical items and their environments.

The formalism for all three types of filters is a labelled bracketing similar to that adopted recently by Gazdar (1981) and also appearing in Chomsky and Lasnik (1977). For a discussion on the restrictions on form and function of these filters, see Binkert (Chapter Seven). Of particular relevance here are the syntactic and lexical filters of RG.

An example of a syntactic filter is given in (50a), and a lexical filter in (50b).

ff8

(50) (a) [N''' - [-CMP] - V''...]

V'''

(b) *[... do ... AFF ...]

V'''

(50a) states that there must be a [-CMP] category in prehead position on the rewrite of V''' to V''. Thus, the category is [+ENV, +X3L, +PRH, -CMP]. In English, this feature cluster specifies the category TNS. In short, (50a) says that every V'', i.e., every clause, must have one, and only one, tense.

(50b), a lexical filter, makes mention of the lexical item "do" and the category AFF or AFFIX. In RG,

the latter category abbreviates the present and past participle markers associated with the progressive, perfective and passive (Binkert Chapter Seven). (50b) asserts that "do" cannot occur with these forms in English, accounting for *do be hunting, *do have hunted, *do be hunted.

Now, to proceed to the formalization of filters pertaining to mai, I propose the following filters to specify the major constraints on the syntactic and lexical distribution patterns of mai.

(51) [[ma] V]
 V' C'''

(52) *[... [[...ma...] PRT chwan] ...]
 V''' V'' V'

Filter (51) specifies that mai is a prehead characterizer directly dominated by V' level. This is a syntactic filter like (50a) and specifies the syntactic constructions available for mai. Filter (52) is a lexical filter referring to the specific lexical item chwan. It specifies that when the progressive aspect occurs in a sentence, mai cannot occur on the V' which contains the head of the clause. In these two statements, all relevant syntactic and lexical constraints on mai are expressed, a remarkably simple account of an ostensibly very complex process.

CHAPTER SIX

THE SEMANTICS OF NEGATION

6.0: Introduction

The complexity observed in the semantics of negation in Newari primarily involves scope ambiguities. Scope may be simply defined here as that constituent or element in any given sentence that is intended to be negated. Scope ambiguity occurs when more than one scope is possible in a sentence resulting in that sentence having more than one interpretation.

In the preceding chapter, I have shown through extended argumentation that despite the apparent complexity in the verbal system in Newari, the syntax of negation can be captured in a single generalization, and the cooccurrence restrictions operating on the syntactic distribution of mai can be specified by a single lexical filter. Now, I proceed to examine the exact nature of scope ambiguities present in Newari.

While *mai* may occur only on a verbal constituent, the scope of negation extends not only to the verb to which it is directly attached, but can potentially extend over almost any constituent in the sentence given a specific context, focus or emphasis. My contention, however, is that, in an unmarked sentence with one or more complements, only certain constituents serve consistently as the scope of negation, and that there is a hierarchical pattern observable in the types of constituents that can fall within the scope of negation.

My first objective in this chapter, therefore, is to examine the kinds of constituents which fall within the scope of negation in an unmarked sentence. My second objective is to select the theoretical framework which best captures and explains these facts. I will show that the notions of "command" relationships and "binding" relationships as stated in the RG analysis adequately explain the scope of negation syntactically.

6.1: Scope Assignment Hierarchy

6.1.1: Narrow Scope

First of all, a distinction must be drawn between two instantiations of scope in Newari: narrow and wide scopes. The narrow scope signifies the unambiguously negated constituent understood as such by a native speaker in a non-contextual situation¹. The wide scope may be defined as any constituent which is contextually determined as being within the scope of negation in any given sentence. A significant fact to be noted here is that by narrow and wide scopes, I do not mean that within a single sentence, there are two kinds of scope, one taking precedence over the other. My point is that in an unmarked negative sentence, where the scope of negation is not specified by topicalization, intonation contours or other disambiguating devices, a scope assignment pattern is observable which chooses as its invariable target a particular constituent. This constitutes what I call narrow scope. The wide scope, on the other hand, represents all other instances of negation motivated by topicalization and focusing devices used in specific contexts by speakers, in fact, to deliberately change the scope from the unmarked

instance.

Consider the following simple negative sentence (1) which can be interpreted in five different ways, obvious when expanded as in (2a) to (2e), where upper case indicates the element scoped by intonation changes. These intonation differences involve juncture, pitch, and contour changes more than stress.

- (1) J̄i lākā-∅ ma-nyā-nā
I-erg shoes-abs neg-buy-p/l

'I did not buy shoes.'

- (2) (a) J̄i lākā-∅ MA-NYĀ-NĀ tara swo

I-erg shoes-abs neg-buy-p/l but look

jaka swo-yā

only look-p/l

'I did not BUY the shoes but only looked
at them.'

- (b) J̄i LĀKĀ-∅ ma-nyā-nā tara safu-∅

I-erg shoes-abs neg-buy-p/l but book-abs

nyā-nā

buy-p/l

'I did not buy the SHOES, but bought the
book.'

- (c) J̄I lākā-∅ ma-nyā-nā tara wā
 I-erg shoes-abs neg-buy-p/l but he-erg
 nyā-ta
 buy-p/3

'I did not buy the shoes but he did.'

- (d) J̄I LĀKĀ-∅ MA-NYĀ-NĀ tara mhichā-yā
 I-erg shoes-abs neg-buy-p/l but bag-gen
 mu-∅ nya-nā
 price ask-p/l

'I DID NOT BUY THE SHOES but asked the
 price of the bag.'

- (e) J̄I LĀKĀ-∅ NYĀ-NĀ-GU
 I-erg shoes-abs buy-prt-sub
 ma-khu
 neg-be-true-p/impr

'It is not the case that I BOUGHT THE
 SHOES.'

The scope of negation covers different constituents in each sentence: the main verb nyānā in (2a); a V'' level constituent lākā in (2b); a V''' constituent j̄i in (2c); the entire V'' and V' level constituents lākā nyānā in (2d); and the whole sentence in (2e). Within a specific context, given intonation, maI can target any of these constituents.

There are certain elements in the sentence,

however, such as the case markers, classifiers, and conjunctions, all of which belong to the category of characterizers, which are not negatable as isolated elements, but these elements are not topicalizable, either.

I argue that there is an unmarked target of NEG in every negative sentence intuitively perceived by a native speaker to be the basic interpretation of a negative sentence in a non-contextual situation. There is a consistent hierarchical pattern of scope assignment rules which invariably assign scope in these sentences. For example, in a sentence which consists of only a noun and a verb, as in (3), it is the verb which is negated in an unspecified context. In other words, *maI* directly negates the verb to which it is prefixed. The verb, therefore, constitutes the narrow scope of NEG in this sentence. This represents the first level in the hierarchy of scope assignment patterns in Newari.

- (3) Ji-Ø MA-DYAN-Ā
 I-abs neg-sleep-p/l
 'I DID NOT SLEEP.'

In sentences such as the following, however, any native speaker can intuitively perceive *chakuti* 'with a knife' in (4), and *bhi-mha* 'good' in (5) as the unambiguously negated elements, not the subject phrase.

- (4) *Ji CHAKU-TI̪ syau-Ø ma-tā-nā*
 I-erg knife-ins apple-abs neg-cut-p/l

'I did not cut the apple WITH A KNIFE.'

- (5) *Wa-Ø BH̪I-MHA machā-Ø ma-khu*
 he-abs good-clf child-abs neg-be-p/impr

'He is not a GOOD child.'

In these sentences, therefore, chakuti̪ and bhi-mha serve as the narrow scope of NEG.

Wide scope, on the other hand, potentially involves any other constituent than the ones in all caps in (3) - (5). In topicalization, wide scope interpretations involve alternatives to the basic word order established in chapter three. Example of possible parallels to (3) - (5) are given in (6).

- (6) (a) *Ma-dyanā JI-Ø*

neg-sleep I-abs

'I did not sleep.'

- (b) *Ji SYĀU-Ø chaku-ti̪ ma-tā-nā*

I-erg apple-abs knife-ins neg-cut-p/l

'I did not cut the APPLE with a knife.'

- (c) *MACHĀ-Ø wa-Ø bhi-mha ma-khu*

child-abs he-abs good-clf neg-be-p/impr

'He is not a good CHILD.'

In (6a), the subject, which has been topicalized, receives wide scope interpretation. In

(6b), syāu- \emptyset , also in topicalized position, receives wide scope. In (6c), machā receives wide scope. A possible variant of (5) and (6c), is (7) in which the topicalized subject receives wide scope.

- (7) Bhi-mha machā- \emptyset ma-khu WA- \emptyset
 good-clf child-abs neg-be-p/impr he-abs
 'HE is not a good child.'

6.1.2: Hierarchical Pattern within narrow scope

In this section, I will illustrate the hierarchical pattern that exists with reference to the scope demarcation in an unmarked sentence. In sentences which consist of only the noun and the verb complex, mai chooses as its target the verbal element to which it is directly attached. This represents the lowest level in the hierarchy of targets. See examples (8-11):

- (8) Ji- \emptyset ma-WAN-Ā
 I-abs neg-go-p/l
 'I did not GO.'
- (9) Ji- \emptyset wan-e ma-FU
 I-abs go-prt neg-can-p/impr
 'I CAN not go.'
- (10) Ji- \emptyset ma-WAN-E fu
 I-abs neg-go-prt can-p/impr
 'I may not GO.'

- (11) Ji-Ø ma-WAN-E ma-FU
 I-abs neg-go-prt neg-can-p/impr

'I CAN not not GO.'

Next, when this basic sentence is expanded to include one or more than one complement, the target shifts to elements other than the verb. Note the progressive shift in the range of scope in the following sentences as the number of complements are increased.

- (12) Ji-Ø CHÉ ma-wan-ā
 I-abs home-loc neg-go-p/l

'I did not go HOME.'

- (13) Ji-Ø TAKHÁ-GU ché ma-wan-ā
 I-abs big-clf home-loc neg-go-p/l

'I did not go to the BIG house.'

- (14) Ji-Ø MHIGA takhá-gu ché ma-wan-ā
 I-abs yesterday big-clf home-loc neg-go-p/l
 'I did not go to the big house YESTERDAY.'

- (15) Ji-Ø PASÁ-LISE mhiga takhá-gu ché
 I-abs friend-with yesterday big-clf home-loc
 ma-wan-ā
 neg-go-p/l

'I did not go to the big house yesterday
 WITH A FRIEND.'

It becomes obvious that there is a certain hierarchical rule which dictates the order of elements

to be negated. The postpositional phrase represents the highest level in the hierarchy, followed by the adverb. Next, the modifying characterizer takes precedence over the nominal element, which in turn assumes priority over the negation of the verb complex:

- (16) (a) Postposition
- (b) Adverb
- (c) Modifier Characterizer
- (d) Nominal
- (e) Verb

Furthermore, whenever a nominal phrase occurs with a modifier, and the negation scopes the modifier, the modifier may be an adjective, a quantifier, a numeral, or a demonstrative, but these occur in a certain hierarchical order too. Observe sentence (17):

- (17) (a) Ritā THIKE-GU lākā-∅ ma-nyā
 Rita-erg expensive shoes-abs neg-buy-p/3
 'Rita did not buy expensive shoes.'
- (b) Ritā NI-JU thike-gu lākā-∅
 Rita-erg two pairs expensive-clf shoes-abs
 ma-nyā
 neg-buy-p/3
 'Rita did not buy TWO PAIRS of expensive
 shoes.'

(c) Ritā THWA ni-ju thikegu lākā-Ø ma-nyā
 these

'Rita did not buy THESE two pairs of
 expensive shoes.'

The order of modifiers is demonstrative followed by a numeral or quantifier and then by an adjective:

- (18) (a) Demonstrative
- (b) Numeral or Quantifier
- (c) Adjective

So far, I have presented a series of examples illustrating my claim that in Newari, the scope assignment pattern in an unmarked sentence follows a consistent hierarchical order.

If we represent this order in terms of the syntactic feature specifications assigned to each category in the RG theory, we discern a pattern almost implicational in range:

(19) I. [+AJT]

(a) [-NML]

(i) [+ENC] [+ENV]

Postposition: [+ENN]

Adverb: [-ENN]

Modifier:

(ii) [+ENC] [+ENN]

Demonstrative: [+X3L]

Numerical/ Quan: [+X2L] [+/- PSH]

Adjective: [+X2L] [-PSH]

(b) [+NML] -- Nominal

II. [-AJT] -- Verb

Thus, feature analysis provides opportunities for specifications of those features which explain the hierarchy that defined category analysis does not.

(20)

- (a) [-AJT] represents the lowest level in the hierarchical order of scope assignment pattern.
- (b) All [+AJT] assume priority before [-AJT].
- (c) Within [+AJT], all [-NML] come first.
- (d) Within [-NML], all [+X3L] receive narrow scope first.
- (e) Within [-X3L], all [+PSH] are assigned scope before all [-PSH].
- (f) All [+ENN] come before [-ENN]
- (g) [+ENN] represents the highest level in the hierarchical order.

This arrangement of syntactic categories in terms of feature specifications captures significant generalizations pertinent to entire categories.

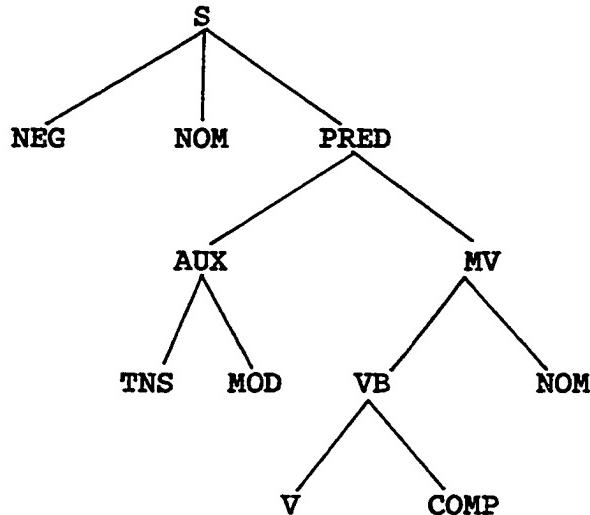
My next concern is to determine what happens when there are multiple occurrences of the same syntactic category within a sentence. I will discuss in the following sections the exact specifications of that hierarchical order in terms of the "command" relations proposed in the RG analysis. But prior to that I will argue how the syntactic concept of command relationships as used in the RG model are more flexible, more general and broader than other notions used in two significant

analyses of negation, namely, Klima's (1964) extensive study, and the Higher Predicate analysis (Lakoff 1965, 1968, 1969, 1970; Carden 1968, 1973), (see Sections 4.1 and 4.2 for discussion).

6.2: Klima's Analysis, HPA, and Scope of NEG in Newari

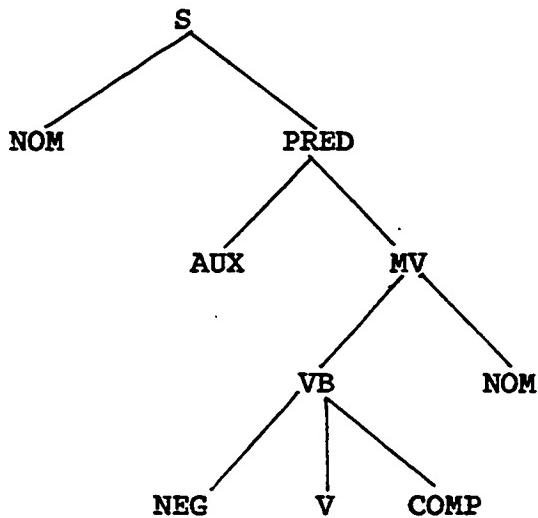
First of all, let us look at the notion of "in construction with" that Klima (1964) uses to differentiate between sentential and constituent negation in English. According to this rule, when NEG is "in construction with" the nominal and the predicate, dominated by S as shown in diagram (21), the scope of NEG extends over the whole sentence; but when the NEG is "in construction with" only certain constituents in the sentence such as the infinitive and gerund phrases, the scope of NEG extends only over those particular constituents, resulting in constituent negation (see section 4.1.2 for further discussion). In other words, the scope of NEG is restricted to the constituents it is "in construction with." See diagram (21) below:

(21)



In this diagram, NEG is shown as occupying sentence-initial position, "in construction with" the nominal and the predicate, resulting in sentential negation. In diagram (22), NEG is shown in verb-initial position, "in construction with" the verb and the complement, resulting in constituent negation.

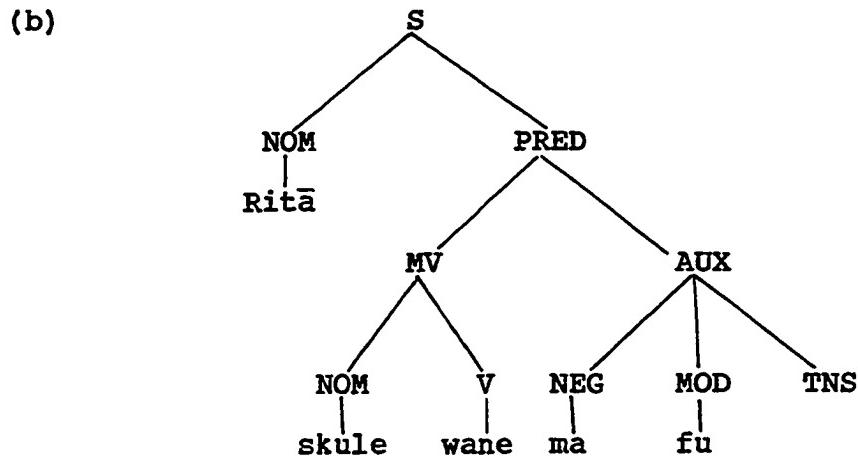
(22)



Lexical negation, *maiII* can be explained using the notion "in construction with," because *maiII* directly negates the item to which it is attached (cf. examples (2-4) in chapter five). However, to apply this notion of "in construction with" to *maiI* proves highly problematical for the following reasons. First, in Newari, *maiI* prefixed to a modal *fu* for instance in sentence (23a) below, scopes over the nominal *skule* in the main verb in one of its interpretations. Note, however, that the modal *fu* is not "in construction with" this nominal. According to Klima, a constituent is "in construction with" another constituent if the former is dominated by the first branching node that dominates

the latter (1964:297). In diagram (23b), observe that the first branching node AUX that dominates fu does not dominate the NOM skule. Therefore, skule is not "in construction with" fu.

- (23) (a) Ritā SKUL-E wan-e ma-fu
 Rita-erg school-loc go-prt neg-can-p/impr
 'Rita can not go TO SCHOOL.'



In (23b), NOM occurs before V in the MV category, and MOD before TNS in the AUX category reflecting the SOV structure of Newari. Note that fu is not "in construction with" skule, the narrow target of scope in this sentence. According to Klima (1964: 297-298), Neg must be "in construction with" the constituent it negates for scope to extend over it. By

that definition, skule is not within the scope of negation in sentence (23a). But this is not the case in Newari. This demonstrates that the notion "in construction with" can not adequately represent the scope of negation in Newari. Reversing the position of NEG to sentence-final or verb-final position based on the fact that Newari is an SOV language, does not change the hierarchical relations.

Second, to provide constituent negation, NEG must be "in construction with" every constituent that it negates. Since almost every constituent can be negated in Newari, if we were to adopt this notion, we would have to posit NEG before every constituent, and specify a proliferation of transformational rules to push the NEG back to its fixed position. Unlike in English where the negative morpheme not enjoys a great degree of flexibility in terms of its syntactic positions (not may precede adverbials as in not long ago; and no may precede nouns and its modifiers as in no money, etc.), mai in Newari occurs invariably before a verbal constituent. Therefore, there is no motivation for positing NEG in various positions. Indeed, topicalizing transformations would further complicate the determination of NEG positions.

Klima's notion can not be extended to account

for the various scopes of negation in Newari in any generalized way, though the principle of using a syntactic notion exclusively to explain the scope of negation deserves to be explored further, and I will do so below.

The HPA discussed in Section 4.2, uses the notion of "command," a broader syntactic relationship. However, if one runs through the analysis, the relevance of the arguments used therein become questionable with reference to Newari data. Lakoff (1965), for example, deals with complex sentences such as 'I don't beat my wife because I like her', and suggests that the problem of scope ambiguities in such a sentence can be explained by treating the adverb as higher predicates in the deep structure.

In Newari, however, sentences with adverbial subordinate structures as the one mentioned above, are not ambiguous as in English. Ambiguity in Newari exists in the level of a simple sentence. Hence, the arguments used in the HPA on the basis of complex structures are inapplicable to Newari. Furthermore, Newari has no passives, the second sentence type of chief concern in HPA discussions (Lakoff 1970).

In the HPA, the higher predicates are said to command sentences. No mention is made of constituent

negation. Our problem in Newari is to deal with constituent negation primarily. For these reasons, I do not find this analysis relevant to the scope of negation in Newari.

Jackendoff (1972), in his interpretive theory of negation, deals with focus, presupposition and surface semantic interpretive rules to account for the scope of negation (see section 4.3). However, we have not exhausted the possibilities of syntactic interpretation of scope. The fact that the command relations in the RG theory can syntactically account for the scope in Newari precludes the need for semantic interpretive rules at this point in the grammar.

6.3: "Command" and "Binding" Relations

In this section, I will examine how the narrow scope assignment pattern in Newari, as discussed in 6.1, can be captured within the RG analysis. The RG theory uses the notions of "command" relationships and "binding" relationships to account for syntactic function, scope of quantifiers, negation, and reference. I have already noted that the command relationship is a much broader and a more general syntactic notion than "in construction with." I will first explain these two notions before endeavoring to explain the scope of

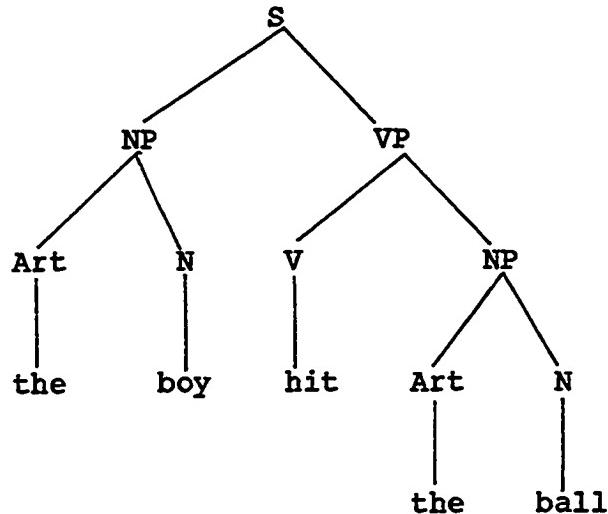
Newari negation in these terms.

In phrase structure grammar, the two syntactic notions of "dominance," and "command" are very fundamental to the representation of hierarchical relationships, and have a long history within the generative tradition. Since these relationships are crucial to the statement of narrow scope assignment in Newari, it is necessary to define precisely how these terms are used and explicated in generative grammar.

The notion of "dominance" may be explained as follows:

A node X is said to dominate all the elements, terminal and non-terminal, that can be connected to this node, to the exclusion of others. For example, in diagram (24), the VP dominates V, hit, NP, Art, the, N, ball; and the S dominates the first NP, VP and all the other elements, terminal and non-terminal dominated in turn by NP and VP. We can trace a path, for instance, from the node V to the node VP, hence V is dominated by VP. VP is connected upwards to S, and hence V is also dominated by S. But note that V is not dominated by the initial NP of the sentence, because we cannot trace a path from NP down to the node V.

(24)



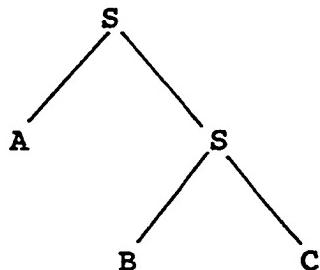
Furthermore, when a line can be traced from a node X to a node Y, and if no nodes intervene, then we can say that X is directly or immediately dominated by Y. In diagram (24), for instance, VP is directly dominated by S, and so is the first NP. Any node X that is directly dominated by Y is said to be a daughter node to Y. Both VP and the first NP in (24) are daughter nodes to S (Chomsky 1964:123).

The "command" relation is defined totally in terms of "dominance" relations. Langacker (1969:167) defines "command" as follows:

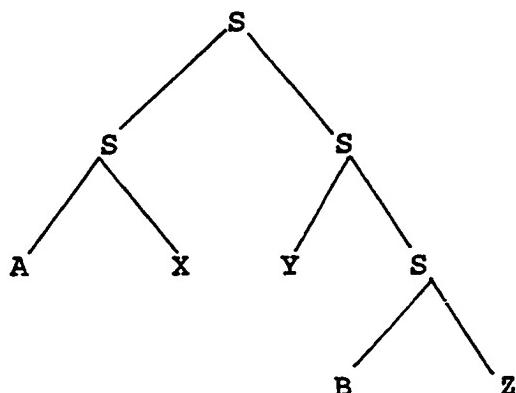
"a node A commands another node B if (i) neither A nor B dominates the other; and (ii) the S node that most immediately dominates A also dominates B." To

illustrate this, see diagrams (25) and (26):

(25)



(26)



In (25), A commands B, since the first node S above A dominates B. In (26), the first S node above A does not dominate B, consequently A does not command B.

Having clarified the two interrelated notions of "command" and "dominance" in their general usage in generative grammar, let us turn our attention to "command" relations in RG analysis. A significant

feature of this analysis is that RG employs two "command" relations: the L-command, that is Left-of-head command; and R-command, that is, Right-of-head command. The L-command may be defined as follows:

"A category X L-commands a category Y,
 if the first branching category Z
 above X dominates Y, and if
 (a) Y is an adjunct and Y is to the left
 of the head of Z or
 (b) Y is not an adjunct and X is
 to the left of Y."

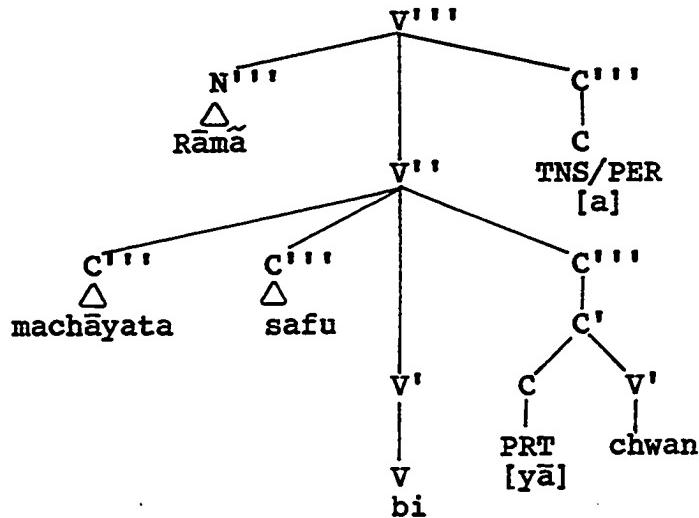
The Right-command may be defined as follows:

"A category X R-commands a category Y,
 if the first branching category Z
 above X dominates Y, and if
 (a) Y is an adjunct and Y is to the right
 of the head of Z or
 (b) Y is not an adjunct and X is
 to the right of Y "(Binkert 1984: 81).

These command relations make explicit left of head and right of head distinction, and make it possible to refer to elements within constituents. Let us illustrate this notion of "command" with an example from Newari:

- (27) (a) Rāmā machā-yāta safu-Ø biy-ā
 Ram-erg child-dat book-abs give-prt
 chwan-a
 prog-p/3
 'Ram is giving the book to the child.'

(b)



In this structure, bi is the head of the construction. The first branching category above machāyata is the V''; this V'' dominates safu, therefore, machāyata L-commands safu, for it is to the left of the head of V'' bi. On the other hand, the TNS/PER characterizer R-commands bi. The first branching category above TNS/PER is V'''; this V''' dominates bi; bi is not an adjunct, and TNS/PER is to the right of bi.

Now, I will proceed to examine the narrow scope

of negation in terms of these "command" relationships. In section 6.1.2, I have already distinguished among various hierarchical orders existing among syntactic categories in the demarcation of narrow scope, and established informally how one category takes precedence over the other. Here I will demonstrate that these facts can be captured in five crucial statements:

- (28) (a) In a sentence which consists of only one simple noun and the verb complex, NEG scopes the verbal element which it L-commands, that is, the one to which it is directly prefixed.
- (b) In sentences with one or more than one simple complement, the category that receives narrow scope is the leftmost daughter of V''. In fact, we may define this residence more precisely by specifying that the leftmost daughter of V'' is the least immediately L-commanding constituent on the V'' level.
- (c) If the sentence contains a complex noun phrase, then the leftmost characterizer in that phrase receives the scope regardless of

the V-level and the position of
the noun phrase.

- (d) If a sentence consists of two complex noun phrases, then the leftmost constituent of the leftmost noun phrase on the V'' level will receive the scope.
- (e) If there are more than two complex noun phrases in the sentence, judgement is not clear since all of them meet condition (28c), and are negatable.

Ambiguity remains because conditions (28b) and (28c) are not mutually exclusive. However, to my mind, there is some preference for the modifier on the leftmost noun phrase on the highest V'' level as the target of negation. Perhaps it is so because it meets conditions (28b), (28c) and (28d).

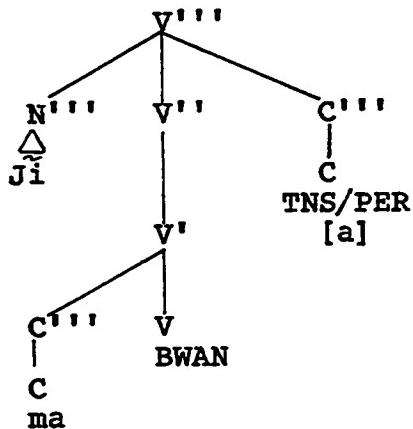
A very significant fact to be noted here is that the effect of the L-command relationship between the NEG and the scoped item in condition (28a) is different from that in conditions (28b-28e), in that, NEG scopes the

element which it L-commands in condition (28a), but the scoped element -- the verb also L-commands NEG; whereas in conditions (28b-28e), the element which L-commands NEG constitutes the item which is scoped by NEG.

Let us see how each of these operate. With reference to statement (28a), observe the following four sentences. The diagrams accompanying each of these sentences clearly illustrate that irrespective of whether the verbal element comes off C''' posthead on the V''', V'' or the V' level, when a sentence contains no verbal complements, NEG scopes those elements which it L-commands, and to which it is directly prefixed.

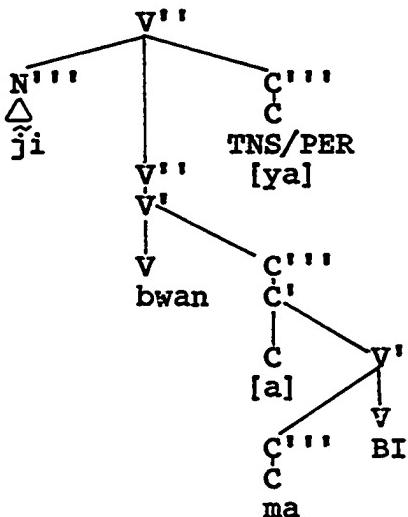
- (29) (a) *Ji* ma-BWAN-*a*
 I-erg neg-read-p/l
 "I did not READ.'

(b)



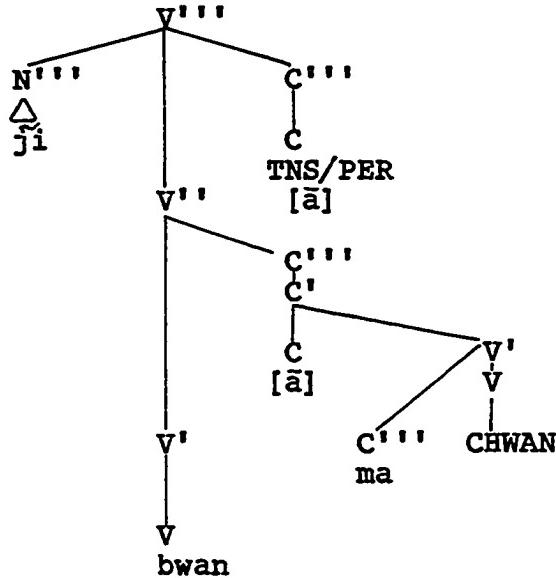
- (30) (a) *Ji bwan-ā ma-BI-yā*
 I-erg read-prt neg-ben-p/l
 'I did not read (FOR SOMEONE).'

(b)



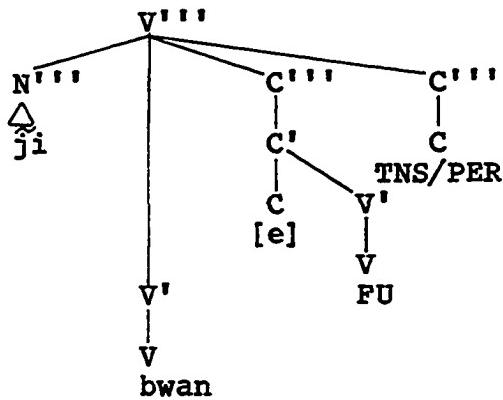
- (31) (a) *Ji bwan-ā ma-CHWAN-ā*
 I-erg read-prt neg-prog-p/l
 'I was not read-ING.'

(b)



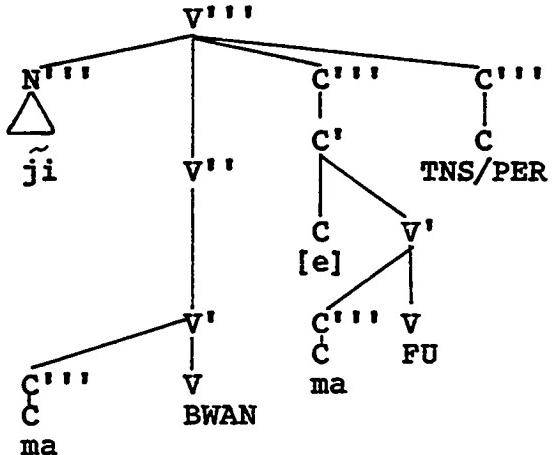
- (32) (a) $\tilde{\text{ji}}$ bwan-e ma-FU
 I-erg read-prt neg-CAN
 'I CAN not read'

(b)



- (33) (a) $\tilde{\text{ji}}$ ma-BWAN-E ma-FU
 I-erg neg-read-prt neg-CAN-p/impr
 'I can not not read.'

(b)

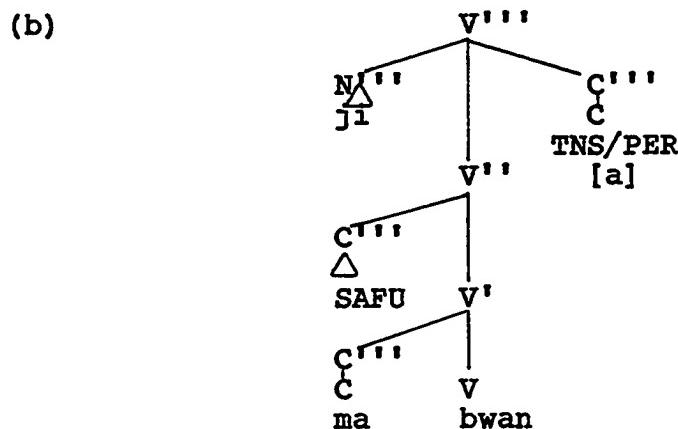


Notice that the main verb (29), the compound verb (30), the progressive (31), and the modal (32) serve as the narrow scopes of negation in each of these sentences. They are also the elements which are L-commanded by NEG, thus demonstrating a direct relationship between scope and L-command relation. Furthermore, in (32), we have multiple negation -- the main verb and the modal are the scoped elements -- note that NEG L-commands both these elements individually, corroborating my claim that the narrow scope of negation in these cases is directly based on the L-command relationship of the NEG to the respective verbal element.

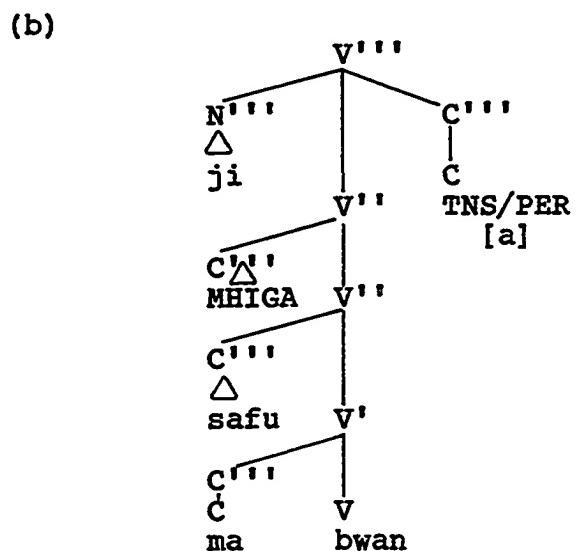
Next, examples (34-35) illustrate with accompanying diagrams how the least immediately commanding constituent is the scoped item in normal untopicalized

sentences with one or more than one complement.

- (34) (a) *Ji SAFU-Ø ma-bwan-ä*
 I-erg book-abs neg-read-p/l
 'I did not read a BOOK.'



- (35) (a) *Ji MHIGA safu-Ø ma-bwan-ä*
 yesterday
 'I did not read a book YESTERDAY.'



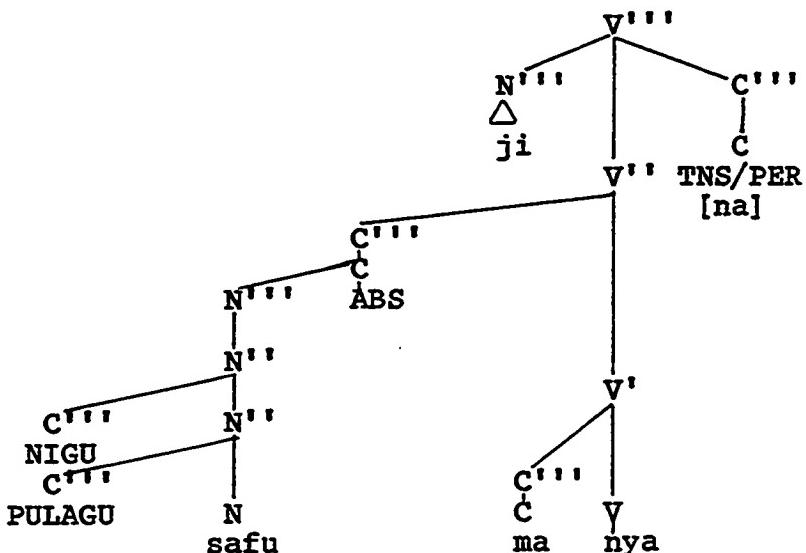
In (36), safu falls within the scope of negation, because it is the leftmost constituent on V'' level in a sentence with only one complement. In (37), the adverb mhiga, the leftmost constituent on the highest V'' level, is the target of scope. Both safu and mhiga L-command the NEG (cf. chapter five for admissibility and justification of V'' level recursions).

To move on to sentences which have modifiers in the nominal phrases, that is, complex phrases mentioned in (28c) above, consider the following sentences:

- (36) $\tilde{Ji} \quad \tilde{PULAGU} \quad safu-\emptyset \quad ma-nyā-nā$
 I-erg old-clf book-abs neg-buy-p/l
 'I did not buy OLD books.'
 (37) $\tilde{Ji} \quad NI-GU \quad \tilde{pulā-gu} \quad safu-\emptyset \quad ma-nyā-nā$
 two
 'I did not buy TWO old books'

In diagram (38), I have shown the structure for both these sentences. Note that the target of scope falls invariably on the leftmost constituent within this residence in each sentence.

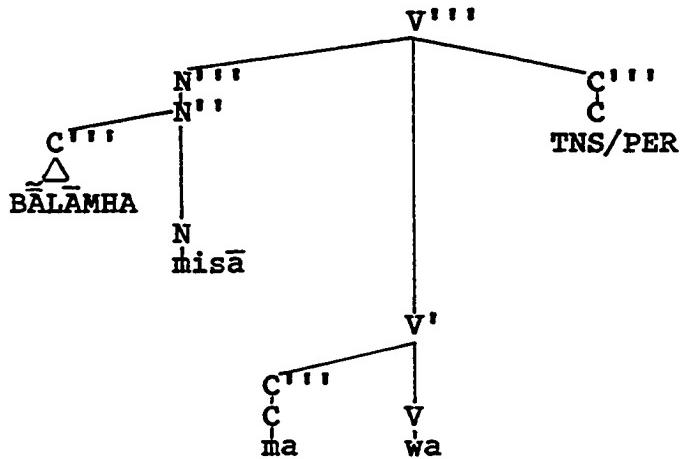
(38)



Furthermore, as stated in (28c) above, if a sentence consists of a complex noun phrase which contains a modifier, the principle that the leftmost constituent takes the scope operates, even on the V''' level. Consider sentence (39) below:

- (39) (a) BALĀ-MHA misā-Ø ma-wa:
 pretty-clf woman-abs neg-come-p/3
 'The PRETTY woman did not come.'

(b)



But if there are two or more than two complex noun phrases, the leftmost constituent of the leftmost noun phrase on the highest V'' level serves as the narrow scope. Consider the following sentences: (40) with two complex noun phrases, and (41) with three complex noun phrases.

- (40) (a) $\tilde{Bālā}-mha \tilde{misā} \tilde{PULĀ-GU} \tilde{safu-\emptyset}$
 pretty-clf woman-erg old-clf book-abs
 ma-byu
 neg-give-p/3

'The pretty woman did not give the OLD book.'

As I have stated earlier, it is difficult to have a clear judgement on what constitutes the narrow scope in sentence (41). It can be considered ambiguous, but to my mind, it is the leftmost constituent on the highest V'' level, which has the greatest possibility of serving as the scope, because it meets all the conditions specified in (28b), (28c), and (28d).

To summarize, I have clearly demonstrated that the narrow scope of negation in Newari can be syntactically specified in terms of the L-command relations proposed within the RG framework. In sentences with no verbal complements, NEG scopes the verbal element it L-commands and to which it is directly prefixed. In other cases, the leftmost constituent in the leftmost category on V'' level which least immediately L-commands the NEG serves as the narrow scope of negation. In the case of a complex noun phrase on the V''' level in a sentence with no other complex noun phrases, the modifier in the noun phrase on V''' level receives the scope.

6.4: Wide Scope of Negation

The wide scope interpretation of negation in Newari may be induced in four ways: (i) by topicalization, that is by effecting changes in word order from basic word order S IO DO V to topicalized word order; (ii) by changes in intonation contours involving junctural and pitch changes; (iii) by the use of emphatic particles such as he, na, and the nasal, suffixed directly to the item intended to be negated. These emphatics also perform another function of changing indefinite elements such as su, 'someone', gana 'somewhere' etc., into what are called "negative polarity" items, that is, items which can occur only in an interrogative or negative environment (cf. section 5.1); and (iv) by the use of specific deictic items such as demonstratives -- thwa 'this', wa 'that', etc., and adverbs thana 'here', and ana 'there', etc.

In this section, I will first discuss how topicalization can be handled by "binding" rules within the RG framework, and then demonstrate how the emphatics and the diectic elements fall into a distinct category which attract the scope of NEG. I will not discuss the changes in the intonation contours which effect the assignment of scope in Newari, because very little is

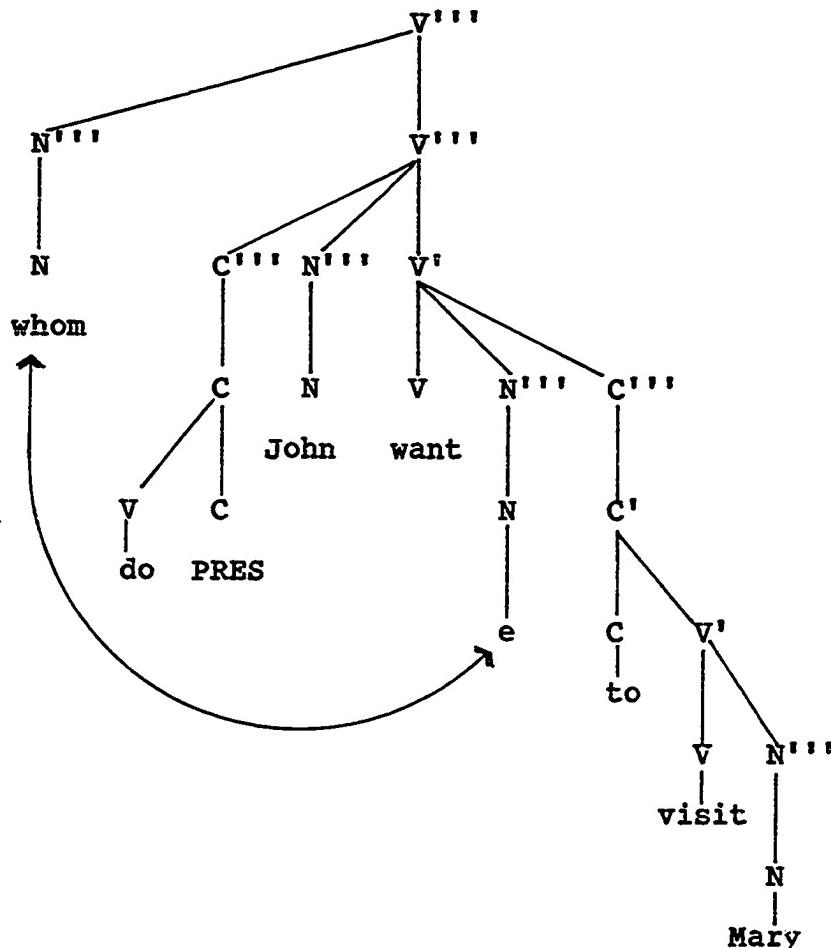
known about Newari phonology and topics such as juncture, pitch accents and intonation are impossible to discuss without a thorough investigation of the phonology of the language.²

First, let us examine the nature of "binding" relations as specified in the RG theory. The notion of "binding" may be explained as follows -- a binding relation may be said to exist between X and Y under the following four conditions:

- (a) if X and Y have equivalent syntactic feature matrices;
- (b) if X dominates a fully specified lexical item;
- (c) if Y dominates 'e', the identity element, and
- (d) if X can occur in the same context as Y.

For instance, in English, Binkert suggests the following structure for the sentence "Whom does John want to visit Mary?" (Binkert 1984: 94):

(42)



Note that the empty category N''' is bound to the N''' on V''' level for it fulfills all the requirements specified in the binding conditions.

Another important condition is that the empty category must be bound to an item outside of the immediate neighborhood of that category. Binkert (1984:143) defines neighborhood as follows:

"A neighborhood embraces all categories that are

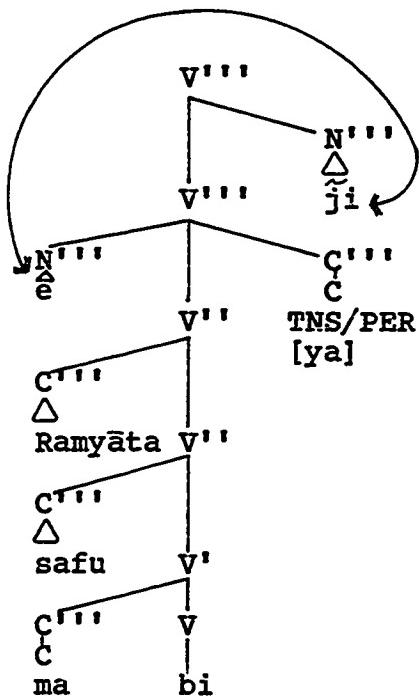
R-commanded or L-commanded by one and the same
 x''' level prehead characterizer".

The immediate neighborhood is defined as the neighborhood immediately embraced by TNS, that is, the v'''' level immediately dominating TNS (Binkert: personal communication forthcoming a).

Let me illustrate how this operates with reference to topicalization in Newari negation.

- (43) (a) Rām-yāta safu-Ø ma-bi-yā JI
 Ram-dat book-abs neg-give-p/l I-erg
 'I did not give a book to Ram.'

(b)



Notice that in (43), the empty category 'e' on v'''' level is bound to the lexically specified category

C''' ji outside the immediate neighborhood of TNS, which is a posthead characterizer in Newari. Furthermore, the empty category shares with the topicalized item all the conditions specified above as required for binding.

Having clarified the notion of "binding" as employed in RG, let me proceed to examine the relevance of this relationship in accounting for topicalization which forces wide scope on negation in Newari.

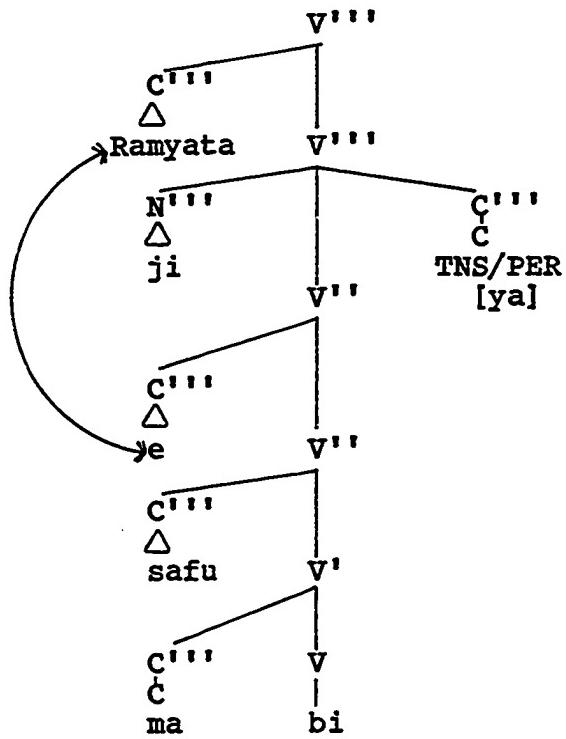
A speaker uses topicalization to focus on the item specifically intended to be negated, in the following ways -- (i) the subject on V''' level is postponed to sentence-final position; (ii) the IO is fronted to S-initial position; (iii) the DO is either moved to a position before the IO or to S-initial position; (iv) the verb is fronted to S-initial position specifically to focus the verb in response to a question (cf. Section 3.1)

Each of these basic positions can be identified by empty categories bound to lexically specified topicalized items. Consider the following three examples in which I illustrate how the empty categories are "bound." We can refer back to example (43) for the topicalization of subject on V''' level, and the following sentences are the other variations on the

basic word order of the same sentence.

- (44) (a) RĀM-YĀTA ji safu-Ø ma-biyā
 'I did not give the book TO RAM.'

(b)

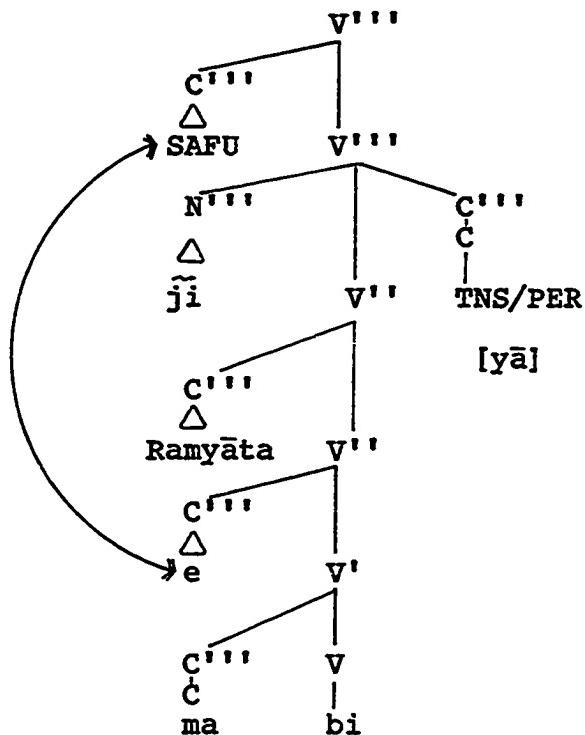


In (44) the IO Ramyata is topicalized to V'...' level in S-initial position. The empty category 'e' identifying its basic position is bound to this topicalized item.

In (45) and (46), I show that the DO and the verb are also topicalizable and bound to their basic positions represented by empty categories in a similar manner.

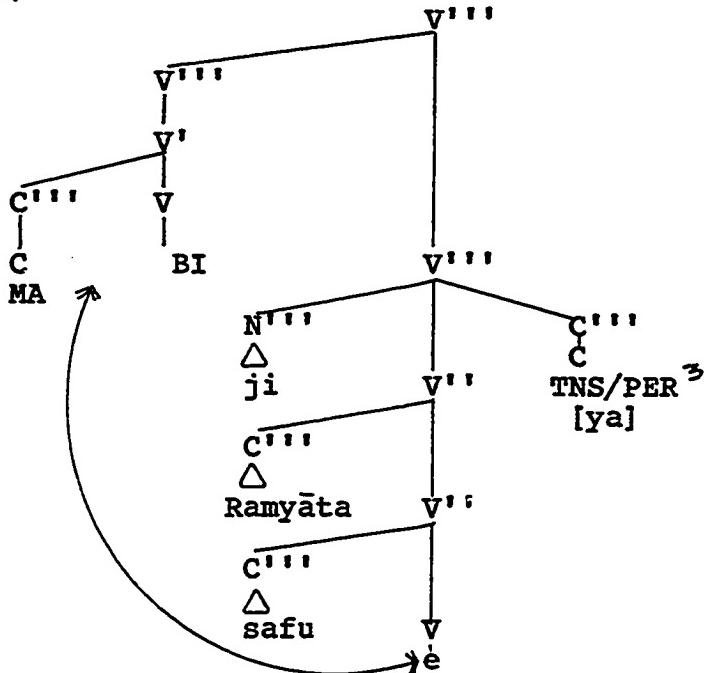
- (45) (a) SAFU-Ø ji RĀM-YĀTA ma-bi-yā
 'I did not give the BOOK to Ram.'

(b)



- (46) (a) Ma-BI-yā ji Ram-yāta safu-∅
 'I did not GIVE the book to Ram.'

(b)



A very significant point to be observed here is that the empty category in examples (44 - 45) above still L-commands NEG. The scope extends over the empty category, which is bound to the topicalized item. The "command" relations therefore still offer valid explanations for the wide scope of negation provided that the empty category is bound to the topicalized lexically specified item.

In sentence (46), however, we note that when the verb is intended to be negated NEG L-commands and scopes over it, as specified in condition (i) of section 6.3. Notice that in the topicalized phrase ma-bi-ya, the

NEG L-commands the verb *bi*. The conditions specified in section 6.3 concerning the relevance of "command" relations to narrow scope assignment are not violated here, provided that the empty category is bound to the topicalized item.

To conclude this section, I observe that the "command" relations combined with the "binding" conditions proposed in RG adequately handle the wide scope induced by topicalization as discussed above. So far, we have found that syntactic explanations amply and adequately account for the scope of negation in the types of negative structures we have examined.

6.5: Emphatics

A very important disambiguating device in Newari negation is the use of emphatic particles. There are two emphatic particles: *na/sa*, and *he*. Both of these occur as bound morphemes, directly suffixed to the word or phrase emphasized. Note how in the following examples the emphasis shifts from one phrase to another depending on where the emphatic particle appears as a suffix.

- (47) *Machā MIKHA-*Ø-*he ma-kan-a*
child-erg eyes-abs-emp neg-open-p/3
'iThe child did not open his EYES'.

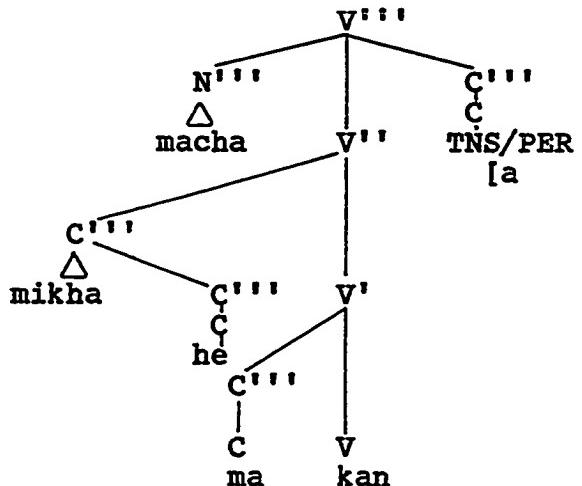
- (48) MACHĀ-he mikhā-Ø ma-kan-a
 child-erg-emp eyes-abs neg-open-p/3
 'The CHILD himself did not open his eyes'.
- (49) Machā mikhā-Ø KA-he ma-kan-a
 child-erg eyes-abs open-emp neg-open-p/3
 'The child just did not OPEN his eyes'.
- In (47), the emphasis falls on the 'eyes'. In (48), it is the 'child' who does not open his eyes, with emphasis on 'the child', and in (49), the 'act of not opening' the eyes is emphasized. In all these instances he functions as an indicator of contrast, an emphaser.

There are two restrictions on the occurrences of he. First, in a noun phrase, he does not occur suffixed to an N''' directly, but occupies a posthead final position off the C''', which contains the case marker. Furthermore, with the exception of a demonstrative, he cannot be attached to any modifier within the noun phrase. Second, in a verb phrase, he does not occur in sentence-final position. If the main verb or the modal needs to be emphasized, it is duplicated, and he is attached to the first duplicated V.

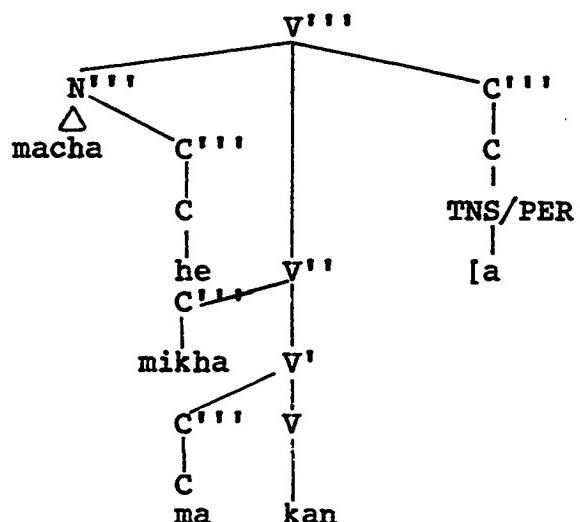
I will illustrate the structures for sentences (47-49) in diagrams (50-52) respectively so that one may clearly see the specific position occupied by the

particle he, and its relationship to NEG.

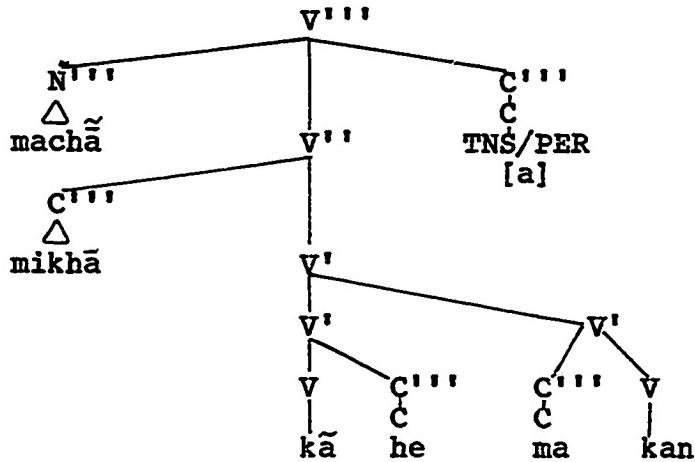
(50)



(51)



(52)



Notice that the emphatic particle he is a posthead characterizer on [-x'' level]. In (51), the main verb ka is reduplicated in order for he to attach itself to the verb, for he can not occur in a sentence-final position. In this case, he R-commands the verb ka, and the V' dominating NEG also R-commands the emphasized item. Observe that the emphasized item takes the scope of negation too. By use of the emphatic particles, the speaker shifts the target of negation from one item to the other. We may say that its function is similar to that of stress in English.

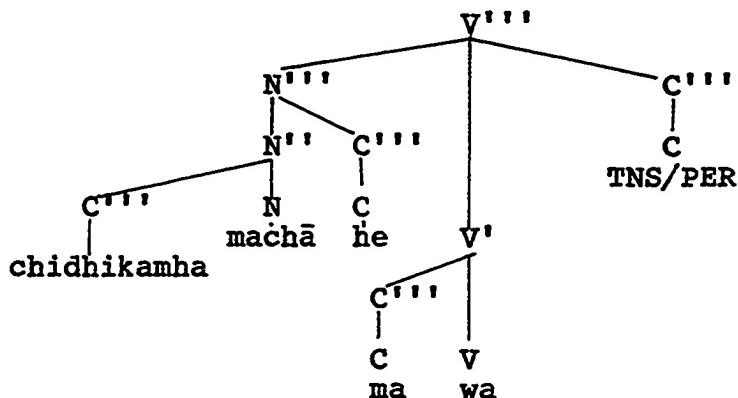
Furthermore, when the emphatic particle occurs suffixed to the noun phrase, it widens the scope of negation from the narrow scope on the modifier to the entire C''' which dominates it. Consider the following

sentence:

- (53) Chidhika-mha machā-Ø-he ma-wa:
 Small-clf child-abs-emph neg-come-p/3
 'THE SMALL CHILD did not come.'

If the emphatic particle were not present in this sentence, the narrow scope would fall on chidhika-mha, the leftmost constituent on V''' level. But the emphatic he widens the scope to the entire noun phrase; he L-commands both chidhikamha and macha. See diagram (54):

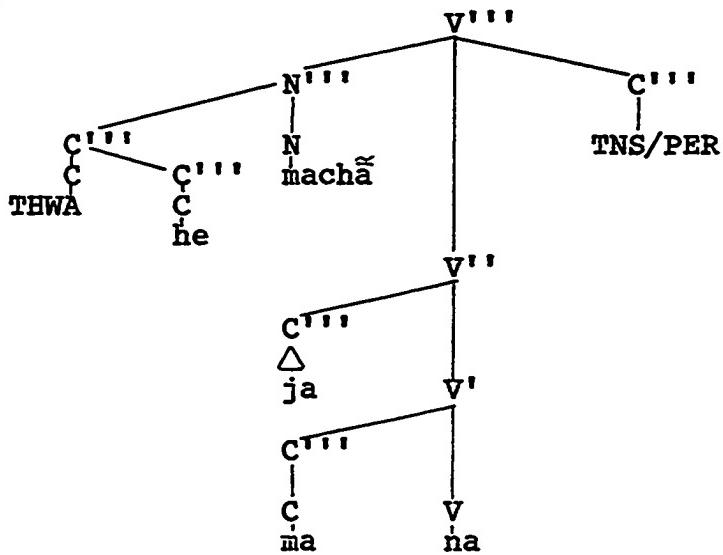
(54)



This widening of scope occurs on any emphasized C'''. When he attaches to the demonstrative, for instance, it scopes only the demonstrative. See example (55):

- (55) (a) Thwa-he machā́ jā-Ø ma-na:
 this-emph child-erg rice-abs neg-eat-p/3
 'THIS child did not eat the rice.'

(b)



Note that the entire C''' prehead is covered by the emphatic he.

The items covered by the widened scope in the C''' are all to the left of he, since he is attached posthead on the C''' level. When the emphatic particle occurs in the verb phrase, as shown in diagram (51), it also extends its scope to the element to the left of it. We may state here that he scopes all the elements which it either L-commands or R-commands.

So far, we have examined the relation of the

emphatic particle to the emphasized elements. Now, let us turn our attention to the relation between the emphasized elements under *he* and the NEG. Observe that the entire C''' (CASE) L-commands NEG in diagram (54), thus serving as the scope of negation under (28c). In diagram (52), V' dominating the NEG R-commands the emphasized item. This provides evidence for the generalization that the scoped element in the sentence can be accounted for in terms of either R-commands or L-commands in relation to NEG.

The emphatics perform another function, that of creating an entire category of negative polarity units by combining with indeterminate items, and attracting the scope of negation to extend over them. Klima (1964) drew our attention to lexical polarity for the first time within generative grammar by discussing a number of polarity items such as *any*, *ever*, *yet*, etc.

These items can only occur in an "affective environment," that is, in a negative or an interrogative sentence (cf. section 4.1.4). In Klima's analysis, the polarity items are derived from corresponding affirmative items such as *some*, *sometime*, and *already* respectively through transformational derivations. The presence of NEG provides a favorable environment for the occurrence of indefinite quantifiers

such as any. In addition, NEG can also be incorporated into the indefinite lexical items as in never, nothing, nowhere etc. Klima devised the two transformational rules, Indefinite Incorporation and Neg-incorporation to account for these conversions (Klima 1964: 279). Furthermore, NEG can also directly precede the NP and its modifiers as well as an adverbial phrase as in 'not many people came to the party' and 'not long ago, Mary was merely a teenager'.

In Newari, due to the fact that maI must invariably be prefixed to the verb which occupies a restricted position in the sentence structure, the two syntactic operations possible in English do not exist in this language. However, there is an entire category of indeterminates which in combination with the emphatic particles function as negative polarity units. In the presence of the emphatics the indeterminates are converted into negative sensitive units.

There is a class of indeterminate items in Newari which are identical to the question words. Only a nasal suffix distinguishes the indeterminates from the question words. Presented below is a representative list of the two sets of corresponding question words and indeterminates.

(56)	<u>Question words</u>	<u>Indeterminates</u>	
su	'who'	sū̄	'someone'
chu	'what'	chū̄	'something'
gana	'where'	gānā̄	'somewhere'
gable	'when'	gablē̄	'sometime'

The indeterminates can occur in the affirmative, negative as well as in the interrogative structures in the same form. Consider the following examples:

In the affirmative sentence (56a), gana can induce only one reading of 'somewhere.' But in the negative and interrogative sentences (56b) and (56c), gana can receive two interpretations and is therefore ambiguous.

If any of the indeterminate items, however, occur with the emphatic particles, two things happen -- first, the presence of mai is required in the sentence,

otherwise the sentence would be rendered ungrammatical (see Section 5.1); second, the indeterminate item with the emphatic suffix invariably takes the scope of negation. Consider the following sentences:

- (58) (a) Sitā GABLE-HE me-Ø ma-hā
 Sita-erg never-emph song-abs neg-sing-p/3
 'Sita NEVER sings a song.'
 (b) *Sitā gablē-he me hā
 'Sita never sings a song.'
- (59) (a) Ji-Ø GANA-nā ma-wan-ā
 I-abs nowhere-emph neg-go-p/l
 'I go NOWHERE.'
 (b) *Ji-Ø ganā-nā wan-ā
 'I go nowhere.'

Sentences (57a) and (58a) convey only one interpretation because the scope of negation is clearly specified by the emphatic particles.

Further investigation of other types of sentences demonstrates that emphatics also attract negation when they follow numerals and quantifiers.

- (60) (a) Jī chapti-he la:-Ø ma-to-nā
 I-erg one drop-emph water-abs neg-drink-p/l
 'I did not drink a single drop of water.'

(b) Rāmā bhatichā-nā ja-θ ma-na:
 Ram-erg little-emph rice-abs neg-eat-p/3

'Ram did not eat even a little bit of rice.'

All these sentences provide additional evidence that the emphatics distinctively focus the scope of negation on the emphasized item. Furthermore, I have shown in diagrams above that the scoped elements may L-command or R-command the NEG.

To conclude, the command relations also capture the wide scope induced by the emphatic particle in negation in terms of both L-command and R-command relations. The difference lies in the fact that the emphatic particle is an overt marker used specifically to focus on certain elements within a sentence, and nullify or supersede the narrow scope of the sentence defined by L-command relations.

6.6: Demonstratives

The demonstratives also induce wide scope in negative structures in Newari. They belong to a separate category from other characterizers, because though they follow condition (28b) as specified in section 6.3, they do not meet condition (28d). Also they take emphatics when no other prehead characterizer on N''' do.

In any sentence with demonstratives whether on

V'' or V''' level, wide scope invariably falls on the demonstrative. When there is only one demonstrative in the sentence as in (61), the scope falls on the demonstrative thwa because it is actually the leftmost constituent. But when there is more than one demonstrative, we face a difficulty in assigning scope, and the judgements are not clear as in sentence (62):

Thus multiple occurrences of the same syntactic category in a sentence pose problems for demarcating the scope of negation. Sentence (62) needs contextualization to specify the scope of negation.

However, with the exception of sentences like (62), one can generalize and state that the emphatics and the demonstratives like topicalization force wide

scope on negation. We may classify demonstratives and emphatics into a separate category of devices which help disambiguate the scope of negation overtly.

6.7: Conclusion

The notion of "command" relations have provided us with a very powerful tool in defining and specifying the scope of negation in Newari. I have shown in the above analysis that narrow scope may be defined solely in terms of L-command relationships, that is, the scoped item invariably L-commands the NEG. But with reference to the wide scope, we find that in topicalization, and in the use of demonstratives, the scoped element still L-commands NEG, but when an overt marker such as the emphatic is involved, the emphasized element may either L-command or R-command the NEG. The notion of "binding" has been shown to be of crucial relevance in relation to topicalized elements.

Thus, these two notions as used in the RG analysis, have made possible the extraction of general rules operating on the narrow and wide scopes of negation in purely syntactic terms. The scope of negation in Newari is definitely complex for so many syntactic processes have been required to account for the scope adequately. Nevertheless, the significant fact

is that I have been able to offer syntactic explanations for a phenomenon considered semantically very involved and intractable without taking recourse to semantic interpretive rules, by exploring the possibilities of syntactic relationships such as "command" and "binding".

¹ Notes on chapter six

¹ Context very often determines the intended interpretation of a sentence for a hearer. A non-contextualized situation may be defined here as one in which the hearer has no a priori knowledge of the context of the utterance; chooses to consider the sentence as an isolated utterance, delivered in normal intonation pattern; and interprets it merely on the basis of the constituent units present in that particular sentence.

² Mention must be made here of Kansakar's (1977) article on the rhythm and intonation in colloquial Newari.

³ A problem encountered in this analysis on how to handle the morphological endings of verbs remains unresolved. Binkert (1984) has never fully explained how the affix-hoppings in English operate. He has relegated this operation to the phonological rules, and intends to handle it by means of lexical filters (cf. Binkert, chapter seven). In example (46a), the TNS/PER ending [ya] forms a suffix to the main verb *bi*, but when the verb is fronted by topicalization as shown in diagram (46b), [ya] is left behind. How exactly the TNS/PER suffix 'hops' to the verb under such conditions is a worthwhile topic for further investigation in a language such as Newari, which abounds in numerous kinds of suffixes.

CHAPTER SEVEN

CONCLUSION

7.0: Introduction

One of the principal goals of linguistic analysis is to discover and extract general principles of operation which govern the linguistic processes under study, and capture these generalizations in the simplest of terms possible, accounting for the maximum number of facts with the minimum of means. According to Chomsky (1962:242), 'we have a generalization when distinct statements about distinct linguistic elements can be replaced by the same, or similar statements.'

This dissertation constitutes the first formalized study of the phrase structure of Newari and the syntax and semantics of negation in Newari within a specific modern linguistic theory, Residential Grammar. Using this framework, I have analyzed the basic constituent structure of Newari. Furthermore, I have demonstrated that the syntax of negation is simple, and

that the scope of negation though much more complex and involving more processes, is accountable in syntactic terms. My purpose in this chapter now, is to point out the nature and the significance of the generalizations which I have achieved in the process of this investigation, and to discuss the manner in which the RG theory has facilitated this analysis and the subsequent determination of relevant generalizations.

This study did not begin as an attempt to verify the RG model. My initial attempts at analyzing constituency and negation in Newari within the current transformational generative framework, with a drastically reduced transformational component, proved frustrating for lack of detailed mechanisms and devices to guide the task of analysis. As the work progressed, problems became apparent; the original ideas turned out irrelevant; and the structure of Newari remained unresolved. At this critical juncture, the RG model was adopted because it provided a rigorous syntactic framework which, I assumed, would facilitate the task of analysis. However, as the analysis progressed, it became evident that this theory carries with it immense potentials for capturing the universal features of language per se. Many of the predictions made in the RG

theory on the basis of English, are confirmed by the analysis of Newari, a language that is very different from English in fundamental ways. I will demonstrate how I have succeeded in approaching and resolving several areas of controversy in this language hitherto considered too complex, such as the scope of negation, the notion of subject, cases, etc., thereby reducing distinct observations of apparently distinct phenomena into simple single statements and achieving a high degree of generality.

7.1: Constituent Structure

I will first consider the issues and generalizations related to my discussion of the constituent structure of Newari. Traditional grammars of Newari provide descriptions of this language in terms of syntactic categories assumed and directly borrowed from Sanskrit. Newari is a Tibeto-Burman language, though heavily influenced by Sanskrit. It contains several significant features such as nominal classifiers, absence of number and gender marking in the verb, animate/inanimate distinctions in the use of cases and number, etc., which have not been discussed in detail in any description because they do not fall into the framework devised in the traditional system modeled for

Sanskrit. The relationship between categories in terms of functions such as subject, object, etc., has also never been clearly defined. The modern linguistic works such as those undertaken by Hale, Srestacharya, and Manandhar (see Section Two), have accepted the traditional syntactic categories without question, and have therefore run into controversies and contradictions. Without working out the basic phrase structure of the language, they have, nonetheless, discussed topics such as the verbal system and the case system in Newari.

Working within the RG analysis, I have been able to define both the constituent structure and the relationship between the syntactic categories in Newari, analyzing the structure of the language *de novo* without assuming *a priori* notions of either a syntactic category or a syntactic function. Transformational grammar in the past twenty five years has focused primarily on the relationship between sentences. It has neglected the analysis of basic constituent structure of the language (Pullum 1985). It has also introduced abstract concepts such as PRO, TRACE, and the transformational rules to state syntactic relationships in grammar (Chomsky 1981). In the RG theory, it is not necessary to take recourse to such abstract notions, because this model provides us

with mechanisms which adequately handle such processes in the following way.

The RG theory has introduced twelve syntactic distinctive features such as [+/-PRH], [+/-PSH], [+/-X3L] etc., (see appendix A), to specify and distinguish among every major and minor syntactic category. A syntactic category is, thus, a bundle of syntactic features. The syntactic features which specify a syntactic category may differ from language to language, therefore the features which are required in Newari may not be identical to those required in English. RG provides for this individual difference. However, one of the most interesting discoveries in my analysis of Newari is that the feature matrix for English is virtually the same as that in Newari. No additional features were required to specify the categories, though Newari possesses categories such as classifiers which English does not have, and English has categories such as articles which Newari does not have. The feature matrix designed for a relatively uninflected language such as English in RG appears to be adequate for a highly inflected language such as Newari. This leads one to conclude that, though we may not claim universality of these specific features for all languages in the world, it is reasonable to assume that

the feature matrix provided in RG may prove highly adequate. Furthermore, these features have made possible explicit statements of syntactic relationships such as "command" and "binding" and the hierarchy of scope assignment rules.

The two features which have been particularly useful in this study are the specification of levels and the prehead and posthead distinctions. Language appears in linear form, but is interpreted in terms of hierarchical relations. The specification of levels has enabled us to use notions such as "dominance" and "command," which have helped us determine syntactic functions such as subject, and object; it has also facilitated the formulation of syntactic rules pertaining to negation. The order of constituents in the sentence is remarkably similar to that of English.

The notion of what constitutes the "subject" in Newari has always been a controversial issue. "Subject" has been defined traditionally as the constituent which denotes the "agent", and/or, constitutes the "topic" of the sentence. By that semantic criterion, in sentences such as jita ne pityata 'I am hungry', (literally 'To me hunger is'), jita is considered to be a "dative subject" because it carries a dative case marker. In Newari, there is person agreement between the subject

and the verb, except when the verb is impersonal. The "dative subject" in the previous example does not agree in person with the verb. This leads to a contradiction, either the subject-verb person agreement rule has to be modified or the "dative subject" has to be proved to be something else. My point is that in traditional grammar, criteria of analysis are extremely confused. On the contrary, within the RG framework, by using a number of arguments based on the principles of syntactic configuration and the nature of case markers as signifiers of what constitutes the "subject" in Newari, I have put forward another hypothesis. The subject occurs on X''' level as a prehead N''', marked by the syntactic case markers for the [ERG] and [ABS] cases. There are no "dative subjects" in this language. These are actually objects marked in the dative case in subjectless sentences (cf. section 3.4). This hypothesis poses as one more contribution to the controversy on the issue of "subject" in South Asian languages.

The RG model also draws a distinction between syntactic and semantic uses of cases. The case system in Newari has always been a controversial area, and the grammarians have never reached a consensus on the exact number of cases which exist in the language (see chapter two). By clearly demarcating between cases which are

determined by syntactic configuration and those which only fulfil a semantic function, we can provide justification for claiming the number and types of cases that we do, instead of arbitrarily claiming any number of cases purely on the basis that they exist in Sanskrit. It would be worthwhile to pursue the approach begun here to determine the precise kinds and number of syntactic and semantic cases in Newari.

In brief, RG's predictions in terms of syntactic features, hierarchical levels and case specifications have all received confirmation in my study, thereby demonstrating the adequacy of this model to the description of a language which, superficially, is very different from English.

My specific contributions to Newari scholarship in the area of constituent structure lie in three significant findings pertaining to the various elements which constitute the verb complex, hitherto not examined in any grammatical description of the language. First, I claim that dhun, traditionally designated as the perfective aspect of the verb, equivalent to -en in English, is actually a modal verb, sharing several features with other modals such as fu (cf. Section 5.2). This explains the differences in the syntactic behavior of the progressive and perfective aspect

markers in Newari, which has remained unexplained in earlier descriptions of the language. In fact, this particular distinction has passed unnoticed until now. Tense and aspect in Newari have been barely touched in this study. They offer an interesting area for future research.

Second, previous studies of verbal complexes in Newari concentrate merely on the classification of verbal bases, and the conjugation patterns of the verb. All verbal suffixes which do not represent TNS/PER, or aspect are classed together categorically as verbal participial forms, but their specific functions are not defined. The present analysis has shown that on each of the V levels, there exists a C''' whose head is a participial affix. A significant discovery in this connection is that the participle head of one level attaches itself to the V' level auxiliary dominated by a level lower than itself. For example, the [e] participle on V''' level directly dominated by C''' occurs as a suffix to the progressive chwan on V'' level; and the [a] participle head on V'' level directly dominated by C''' is attached to the compound verb operator on V' level. Following this pattern consistently, the head participle [PRT] on V' level occurs as a suffix on the main verb (see Section 5.2). This interesting phenomenon

had remained unobserved in Newari grammars.

There is a major problem encountered with reference to the separation of bound particles to another level distinct from the verbs to which they are suffixed. Binkert (1984) relegates affix-hopping in English to "phonological rules", although he does not clearly specify what those phonological rules precisely are. Lexical filters are another means adopted to handle this operation. In Newari, how these particles "hop" from one level to another remain unresolved in this study.

Third, contrary to traditional analysis, I argue that the negative imperative marker ma-te can be broken into ma (the negative morpheme), and te a modal like fu and dhun. I consider te to be a modal, because it has features similar to the other modals, although it is not completely like them; te does not occur alone in other instances, because the positive imperative marker is in the form of a verb conjugation. However, to consider mate as an exception to the general rule of negative formation pattern is unjustifiable, even though we do not find occurrences of te as a free morpheme elsewhere (see Section 5.3).

7.2: Scope

Next, let us consider the issue of the scope of negation in Newari. Various studies on negation (see Section 4), have claimed again and again that the scope of negation is too semantically involved to be adequately handled by syntactic rules alone. A major conclusion arrived at in most of these studies is that factors such as presupposition, implicature, context, knowledge of speaker-hearer, etc., must be considered in order to explain the scope of negation. Recourse to semantics for this purpose, on the other hand, has been haphazard, because of the lack of a clear distinction between the domains of syntax and semantics. My analysis of the scope of negation in terms of "command" and "binding" relations has revealed that this is not the case. I have shown that given an explicit syntactic framework such as RG, both the narrow and the wide scopes of negation in Newari can be accounted for syntactically.

Perhaps scope is not a semantic notion as has been assumed. It is clear that in Newari, though the syntax of negation is captured in two simple generalizations, the complexity of scope requires several processes such as L-command and R-command

relations, binding relations, topicalization, intonation contours, and overt markers to capture the scope. However, the important point is that though the scope is complex, syntactic processes can offer an adequate explanation for it. There is a definite hierarchy in the types of syntactic categories which can be assigned narrow scope, and this hierarchy can be specified in terms of syntactic features. While verification is needed, the hierarchy also seems to hold in English. For example, if we take a sentence such as 'I did not see a beautiful lady', one of its readings is 'I saw a lady but not a beautiful one', that is, the scope of negation falls on the modifier 'beautiful'. If we expand this sentence into 'I did not see a beautiful lady yesterday', the scope would fall on the adverb 'yesterday'. Further expansion of the same sentence into 'I did not see a beautiul lady yesterday on the beach', the scope can fall on the prepositional phrase, provided contrastive stress is not on any other element in the sentence. Thus, a hierarchy similar to that in Newari may be shown to exist in English too.

A question pertaining to scope which has been left unanswered in this dissertation involves sentences which have multiple occurrences of the same syntactic category. My judgements are not clear on which element

actually receives the scope in such types of sentences. It also seems that there are different strengths of preference, for example, in a negative sentence which has a modifier in all its noun phrases; the leftmost modifier in the leftmost noun phrase, to my mind, appears to receive the wide scope. But since conditions for scope assignment are not mutually exclusive, the strength of preference is not all that strong. This question of the strength of preferences raises a very fundamental point concerning the use of intuition in syntactic analysis. Do different strengths of preference redefine the notion of what is grammatical in terms of speaker judgements? Future research must address this question.

The syntax of negation appears more complex in English than in Newari. Areas of ambiguity in English are different from those in Newari. English abounds in structural ambiguities, and studies on negation in English tend to push all questions that are unanswerable within the frameworks used into the domain of semantics. In light of the present study, it is unclear whether this is because the scope of negation in English is unaccountable in syntactic terms or if no adequate model has yet been used. I have already shown that the scope of negation in Newari is accountable in syntactic terms

in the RG framework. Negation is not covered in great detail in Binkert (1984). If a study such as this one were conducted in English, we would be in a position to determine if and how the relationship between syntax and semantics differs from language to language cross-linguistically. In other words, the function that syntax and semantics performs in each individual language may not be identical, and the locus of boundary between them may also differ from one language to the other. Given the specificity of RG syntax and the success of the present study, the next direction for studies on negation in language would be to examine negation in RG terms in other languages.

7.3: Outline of Findings

This study has successfully explored many issues in Newari constituent structure and negation hitherto either unnoticed, unexplained or controversial. It has also presented several new findings in the course of the analysis as pointed out in Section 7.2. A summary of all the important findings is provided below:

A. Constituent Structure:

(i) The wide range of acceptable word orders of constituents within a sentence in Newari reflects two kinds of word orders in this language -- Normal word

order, and Topicalized word order. The basic word order is determined as S IO DO V (Section 3.1)

(ii) Three different levels (X'''' , X''' , X'') above X are posited to account for the relevant structural differences among phrasal hierarchies in Newari.

The Subject occurs on the highest V'''' level as a prehead resident, an adjunct.

TNS/PER and Modal occur as posthead characterizers on V'''' level, TNS/PER in the second posthead position, and Modal in the first. Tense and Person are synthesized in Newari and is represented here as a single node (Section 5.2.2)

The Indirect Object and the Direct Object occur as second and first prehead characterizers respectively on V''' level. Our reasons for establishing this structural distinction between subject and object on different levels are given in section 3.3. (Important modifications to this analysis are presented in Sections 3.4 and 5.2).

The Aspect Chwan occurs in a posthead position on V''' level (Section 5.2.2).

On V'' level, the Compound Verb occurs as a posthead operator verb.

The Negative mai is a prehead characterizer on

V' level (Sections 5.2 and 5.3).

(iii) The case system is reanalyzed on the basis of the RG criterion on the syntactic and semantic uses of cases (Binkert 1984: 191). The ERG and ABS are claimed as purely syntactic cases while the other six cases are considered to have semantic uses only in the language (Section 3.4).

(iv) It is hypothesized that subjectless sentences are possible in Newari, and that the only noun phrases which can serve as true subjects are agents in the ABS and ERG cases.

(v) A syntactic feature matrix of the syntactic categories of Newari is presented in terms of twelve distinctive features provided by the RG framework (Section 3.6).

(vi) The internal structure of the Noun Phrase is analyzed (Section 3.5).

(vii) The order of elements within the verbal complex is as follows: [MV] [PRT] [CPD] [PRT] [PROG] [PRT] [MOD] [TNS/PER]. The distribution of the various elements of the auxiliary on different hierarchical levels as specified in (ii) above reflect important structural differences (Section 5.2.3).

Three innovations introduced with reference to the auxiliary are -- first, it is argued that dhun is

not an aspectual verb as hitherto claimed, but is actually a modal; second, -te of mate, the negative imperative marker is also a modal; and third, the [PRT] suffix, the head of one level attaches itself to the V' auxiliary dominated by a level lower than itself (Sections 5.2.2 and 5.2.3).

B. Negation:

(i) Two types of negative formation patterns are distinguished: negatives formed by a verbal prefix mai, denoting sentential or/and constituent negation; and lexical negatives maII (Section 5.1).

(ii) A syntactic filter specifies the syntactic constructions available for mai and states that mai is a prehead characterizer dominated by V' level.

A lexical filter specifies that when the progressive aspect occurs in a sentence, mai can not occur on the V' which contains the head of the clause.

These two statements capture the major constraints on the syntactic and lexical distribution patterns of mai (Section 5.3).

(iii) A distinction is drawn between two instantiations of scope in Newari: narrow and wide scope. The narrow scope signifies the unambiguously negated constituent in a non-contextual situation. The

wide scope may be defined as any constituent which is contextually determined as being within the scope of negation in any given sentence (Section 6.1.1).

(iv) It is argued that the narrow scope assignment pattern follows a consistent hierarchical order. In terms of feature specifications, this hierarchy may be represented as shown in example (20) in Section 6.1.2.

(v) It is demonstrated that the L-command relations proposed within the RG framework, can syntactically specify the narrow scope of negation.

In sentences with no verbal complements, NEG scopes the verbal element it L-commands and to which it is directly prefixed.

In other cases, the leftmost constituent in the leftmost category on V'' level which least immediately L-commands the NEG serves as the narrow scope of negation.

In the case of a complex noun phrase on the V''' level in a sentence with no other complex noun phrases, the modifier in the noun phrase on V''' level receives the scope (Section 6.3).

(vi) Wide scope is induced by topicalization, intonation contours, overt emphatic markers, and demonstratives.

Topicalization is handled by "binding" rules within the RG framework. The empty category still L-commands NEG. The scope extends over the empty category which is bound to the topicalized item.

The emphatics and the deictic elements fall into a distinct category which attract the scope of NEG. In the use of demonstratives, the scoped item L-commands NEG, but when an overt marker such as the emphatic is involved, the emphasized element may either L-command or R-command the NEG (Sections 6.4, 6.5 and 6.6).

Thus, these two notions of "command" and "binding" relations have made possible the extraction of general rules operating on the narrow and wide scopes of negation in purely syntactic terms.

A significant fact to be noted here is that this analysis has been successful in offering syntactic explanations for a phenomenon considered semantically very involved and intractable, without taking recourse to semantic interpretive rules.

In conclusion, I will add that within the areas I have investigated, this analysis verifies the relevance and adequacy of a totally non-transformational grammar as proposed in the RG theory and demonstrates how this model allows a considerable simplification in

the formulation of constraints and the statement of the negation rule, unforeseen at the beginning of the investigation. Above all, it has enabled us to capture the maximum number of facts with the minimum of means, and thereby achieve one of the principal goals of linguistic analysis: the expression of linguistic generalizations.

APPENDIX A

RG SYNTACTIC FEATURE MATRIX OF ENGLISH

VERB	ADJUNCT										
	CHARACTERIZERS										
	NOUN	NUM	TNS	CASE	DEG	ART	ADV	ADJ	PREP	CPL	CONJ
NOM.	-	+	+	-	-	-	-	-	-	-	-
NEI.	+	+	-	-	-	-	-	-	-	-	-
PREH.	+	+	-	+	+	+	+	+	-	+	-
POST.	+	+	+	-	+	+	-	+	+	+	+
/_N.	+	+	+	-	+	-	+	-	+	+	+
X'''L.	-	+	+	+	+	+	+	-	+	+	+
COMP.	+	+	-	+	-	-	-	-	+	+	+

TABLE TWO

(Binkert 1984: 72)

VERB	CHARACTERIZER										
	NOUN	NUM	TNS	CASE	DEG	ART	ADV	ADJ	PREP	CPL	CONJ
ADJ.	-	+	+	+	+	+	+	+	+	+	+
NOM.	-	+	+	-	-	-	-	-	-	-	-
NEI.	+	+	-	-	-	-	-	-	-	-	-
PREH.	+	+	-	+	+	+	+	+	-	+	-
POST.	+	+	+	-	+	+	-	+	+	+	+
/__N.	+	+	+	-	÷	-	+	-	+	+	+
/__V.	+	+	-	+	-	+	-	+	+	+	+
/__C.	+	+	+	-	-	+	-	+	-	+	+
X'''L.	-	+	+	+	+	+	+	-	-	+	+
X''L.	-	+	-	-	-	-	-	+	+	+	+
X'L.	+	+	-	-	-	-	-	-	+	+	-
COMP.	+	+	-	+	+	-	-	-	+	+	+

[+NEIGHBCR] = can have a characterizer in X''' level

prehead position

[+PREHEAD] = can occur in prehead position

[+POSTHEAD] = can occur in posthead position

[+/__N] = can occur in N''' immediately dominated
by some N level

[+/__V] = can occur in V''' immediately dominated
by some V level

[+/__C] = can occur in C''' immediately dominated
by some C level

[+X'''LEVEL] = can occur in the X'''LEVEL, i.e.,
as a daughter of X'''

[+X''LEVEL] = can occur in the X''LEVEL, i.e.,
as a daughter of X''

[+X'LEVEL] = can occur on the X'LEVEL, i.e.,
as a daughter of X'

[+COMP] = can govern an adjunct on the X' level.

(Binkert 1984: 194-195)

TABLE THREE

	AJT	NML	NEI	ENN	ENV	ENC	X3L	X2L	X1L	PRH	PSH	CMP
VER	-	-	+	+	+	+	-	+	+	+	+	+/-
AUX	-	-	-	-	-	+	-	-	+	+	+	-
MOL	-	-	-	-	-	+	-	-	+	+	-	-
NOU	+	+	+	+	+	+	+	+	+	+	+	+/-
WHQ	+	+	+	-	+	-	+	-	-	+	-	-
REL	+	-	-	-	+	-	+	-	-	+	-	-
CPL	+	-	-	-	+	-	+	-	-	+	-	-
DET	+	-	-	+	-	-	+	-	-	+	-	-
DGR	+	-	-	+	-	-	+	-	-	+	-	-
TNS	+	-	-	-	+	-	+	-	-	+	-	+
AVB	+	-	-	-	+	+	-	+	-	+	+	-
ADJ	+	-	-	+	+	-	-	+	+	+	+	-
PPN	+	-	-	+	+	+	+	+	+	+	+	+/-
SCJ	+	-	-	-	+	+	+	+	+	+	+	+

TABLE FOUR

Syntactic Feature Matrix of Residential Grammar

Abbreviations

VER:	VERB	DET:	DETERMINER
AUX:	AUXILIARY	DGR:	DEGREE
MOL:	MODAL	TNS:	TENSE
NOU:	NOUN	AVB:	ADVERB

WHQ:	INTERROGATIVE PRONOUN	ADJ:	ADJECTIVE
REL:	RELATIVE "that"	PPN:	PREPOSITION
CPL:	COMPLEMENTIZER	SCJ:	SUBORDINATING
			CONJUNCTION

AJT: ADJUNCT; freely occur in sentence initial position; can be embedded into the X''' level of another category; always have an X''' level.

NML: NOMINAL; precede characterizer in prehead
and posthead position on every X level;
always have a case.

NEI: NEIGHBOR; always have a characterizer
in X''' level prehead position, the position
which determines the command properties of
phrases.

ENN: ENVIRONMENT OF N; can occur in N'''
immediately dominated by some N level of
the N'''

ENV: ENVIRONMENT OF V; can occur in V'''
immediately dominated by some V level of
the V'''

ENC: ENVIRONMENT OF C; can occur in C'''
immediately dominated by some C level of
the C'''

X3L: X 3 LEVEL; can occur as a daughter of some
X''' level

X2L: X 2 LEVEL; can occur as a daughter of some
X'' level

X1L: X 2 LEVEL; can occur as a daughter of some
X' level

PRH: PREHEAD; can occur in prehead position

PSH: POSTHEAD; can occur in posthead position

CMP: COMPLEMENT; can govern a complement on the
X' level

(Binkert 1985: forthcoming a)

APPENDIX B

LIST OF ABBREVIATIONS

A	Adjunct
ABS	Absolutive
Adj	Adjective
Adj.P	Adjective Phrase
Adv	Adverb
C	Characterizer
Clf	Classifier
Com	Comitative
Conj	Conjunction
Cpl	Complement
Dat	Dative
Deg	Degree
Dem	Demonstrative
DO	Direct Object
Ela	Eltative
Emp	Emphatic
Erg	Ergative
Exc	Exclusive
Gen	Genitive
Imp	Imperative
Impr	Impersonal
IO	Indirect Object
Inf	Infinitive
Ins	Instrument
Loc	Locative
Neg	Negative
NP	Noun Phrase
np	Non-past/present (future)

Num	Number
p	past/present
PS	Phrase Structure
PER	Person
pl	Plural
perf	Perfective
Post.P	Postpositional phrase
prog	Progressive
prt	Participle
Q	Question
rel	relativizer
S	Subject
Ss	Sentences
sub	Subordinator
temp	Temporal
TNS	Tense
V	Verb
1	First person
2	Second person
3	Third person
△	internal structure
	unanalyzed

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